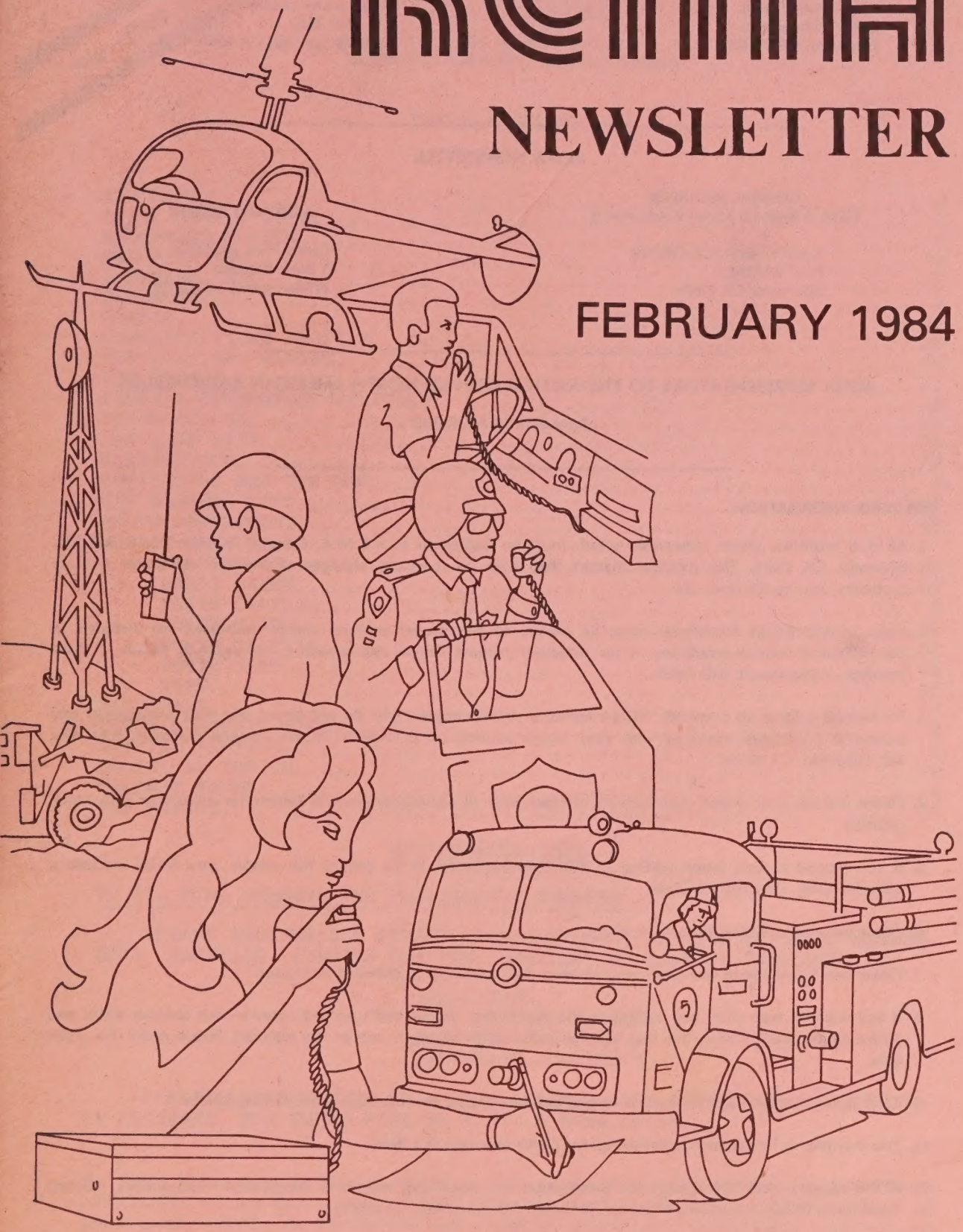
RCMA

NEWSLETTER



FEBRUARY 1984

FIRST NATIONAL AND INTERNATIONAL ORGANIZATION
OF MONITOR RADIO LISTENERS

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RCMA NEWSLETTER

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Jerry Short (CA-OR-002)

FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to R.C.M.A. General Manager, P.O. Box 542, Silverado, CA 92676. This includes matters that relate to renewals, changes of address, newsletter delivery problems, joining the club, etc.

2. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropriate, send input to RCMA, 1 West Potomac, Williamsport, MD 21795.

3. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA General Manager, P.O. Box 542, Silverado, CA 92676.

4. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.

5. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

6. Please write on only one side of the paper.

7. Please don't combine in one letter several items that should go to different addresses.

8. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

9. Your RCMA membership number and expiration date appear on your newsletter mailing label.

10. You may join or renew your membership for ONLY one year at a time.

11. RCMA accepts paid advertising. For information on advertising rates and mechanical requirements, contact Carol Ruth, RCMA Advertising Manager, P.O. Box 342, Silverado, CA 92676.

CBS FREQS FOR '84 SUPERBOWL - p. 45

RCMA NEWSLETTER
Issue 96 Februarv 1984
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ATTENTION!

TO ALL RCMA MEMBERS AND PROSPECTIVE MEMBERS -

PLEASE ADDRESS ALL FUTURE CORRESPONDENCE (INQUIRIES ABOUT MEMBERSHIP, RENEWALS, ADDRESS CHANGES, DELIVERY OR RENEWAL PROBLEMS) TO:

CAROL RUTH
RCMA GENERAL MANAGER
P.O. BOX 542
SILVERADO, CA 92676

CORRESPONDENCE SENT TO RCMA'S ANAHEIM POST OFFICE BOX WILL STILL BE ANSWERED, BUT THERE WILL BE A 4 - 6 WEEK DELAY.

The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $16.50 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$18.50; Europe—$20.00, South Pacific and Asia—$21.50. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted © Reproduction of any material in this newsletter is prohibited without prior written consent.

• • Calendar • •

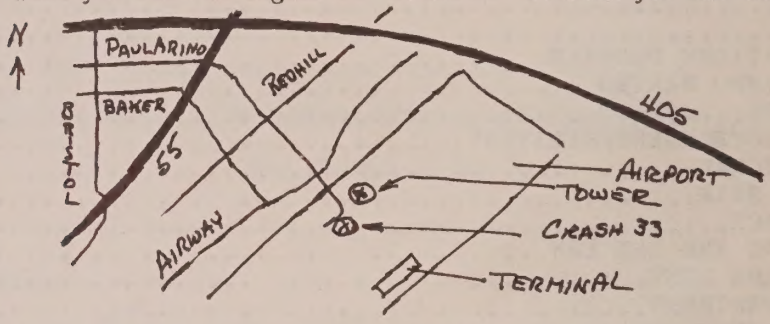
Send notices of upcoming events for the Calendar section to:
John Clark, RCMA, P.O. Box 4653, Anaheim, CA 92803.
Please send notices well in advance of the Newsletter deadline.

Greater L.A. Area R.C.M.A. Eric Christensen CALA045 Presiding

NOTE: Starting in February 1984 meetings will be held on the fourth Friday of the month.

January 20 FRIDAY Tour Orange County Airport Tower Facilities 8:00 PM

The New John Wayne Airport tower is located on the west side of the airport across from the terminal buildings. the map below indicates the major side streets. Parking in the area should be available at the time of the tour without much difficulty. Best exit from the freeway system is from the 55 at the Baker Paularino off ramp.(Southbound on 405 exit on Bristol --note no off ramp at Redhill) When you see the lights of "Crash 33" station you are there.



Talkin on 146.46 223.76 448.750 all simplex

February 24 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

Sharing session. Bring the results of all the new scanners you obtained over the holidays.

March 23 FRIDAY Tentative Tour of Orange County Communications Center 400 The City Drive, Orange, CA

April 25 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

A shortwave session. Bring your shortwave rig for comparisons, and selected frequencies for sharing.

R.C.M.A. Chicago

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Meetings: NANCINI'S Resturant 5555 St Charles Road, Berkeley, Il
two blocks east of St Charles Road exit from Eisenhouer Expressway Extention I-290 (phone 312 544 7277)

Saturday	January	14, 1984	1:00 PM
Saturday	March	4, 1984	1:00 PM
Saturday	April	14, 1984	1:00 PM
Saturday	June	9, 1984	1:00 PM
Saturday	August	4, 1984	1:00 PM
Saturday	August	19, 1984	Picnic/Field Exercise *
Saturday	September	22, 1984	1:00 PM
Saturday	November	10, 1984	1:00 PM

*Write for time, map, and details of this fun day

Calendar continued

Visitors are welcome but please confirm the date in advance.

A SASE on file assures notification of tours and other items which may be scheduled on short notice.

All Ohio Scanner Club
Jerry Callam- Prresident
10 Avalon Road, Mt. Vernon, Ohio 43050

Austin Area Radio Listeners Meeting
Contact Bob Shrader (512) 926-9516

Golden Gate Communications Association
James Zuchelli CAST001
P.O. Box 1861 Modesto, CA 95353

Meetings at Hayward Library
Mission & C Streets, Hayward

R.C.M.A. Philadelphia Gerald M. Schoaf, Floyd Schoenberg, C. Willard Load
PA-036 PA-076 PA-164
P.O. Box 213, Upper Derby, PA 19082 (215) 356-1982

Meeting the first Monday of the month, 7:30 PM at

Saint James Church Next to "The Grange"
Corner of Myrtle Ave & Warwick Road
Haverford, PA 19083

Talk In On: CB Channel 9 GMRS 467/462.675 Hams 147.66/.06

R.C.M.A. Connecticut Chapter

Contact Bill Moore CT 038 203-223-0840
950 Farmington Ave, New Britain, CT 06051

Southern New England Scanners Club

Contact Robert Murphy SNEC President 401-353-0208
P.O. Box 1591, Pawtucket, RI 02862

R.C.M.A. Minneapolis-St. Paul Area

Contact: Chuck Steier MN-008 (612) 927-9253
4820 Hwy 7, Minneapolis, MN 55416

A SASE on file assures notification of chapter activities (tours, gatherings, etc) non members are welcome to attend.

********** 1980-83 R.C.M.A. Newsletter back issues are now available.

Price $1.50 per copy

Orders should be sent to: R.C.M.A.
Bill Ell, Secretary
2831 Hermanos Street
Pasadena, Ca 91107

THOUGHT waves

Ginny Slick, RCMA Assistant Editor, 1 West Potomic, Williamsport, MD 21795

My mail this month included an article sent me by Gary Bottrel. He found it in Police Times which is published by the American Police Academy, so it gives us some idea of the thoughts held by police personnel on the topic of 'citizens armed with cheap police scanners.' The article quoted an FBI spokesman on scanner freaks who listen to the broadcasts and then do something to foul up the arrest or ongoing investigation of the suspect. He had bad words to say about the Daily Press also, calling them the worst culprits of all. No mention was made of any times when scanner buffs have aided the different public service groups. It is my hope that our members take the hobby a little more seriously.

Scott Glicker forwarded a copy of an article concerning HAMS activities during the Grenada invasion. Lately I've noticed a huge upswing in the number of stories about HAMS and shortwave enthusiasts. How about in your area? Are your papers and TV stations suddenly noticing these hobbies? The DC stations have been paying particular attention to them; covering attempts to reach Grenada, and most recently an attempt by local HAMS to contact the space shuttle. I hope that all this publicity doesn't lead to a drop in listening as we have lost enough good listening through careless talk.

Carol has informed me that the June, 1984 issue will be our 100th!! How many of you out there can remember the first newsletter? I'd love to hear from you. Perhaps we can put together a lot of 'Your Thoughts' on the old days or commentaries about the changes our hobby and newsletter have faced over the years. Although I was not a 'charter member', I did send for all the back issues, and they were so interesting. It was fun to see the changes in format and style.

Those of you who remember the 'good 'ol days' of RCMA can make our 100th issue a memorable one if you'll take the time to write 'Your Thoughts' on this occasion. There are a lot of folks out there who would be really glad to hear about early monitoring experiences when (sigh) one could hear nearly anything. So sharpen your pencils, old-timers, and

Write Soon,

Ginny

YOUR THOUGHTS

1 West Potomac, Williamsport, MD 21795

To the Editor:

More on the scanner intermodulation problem: a CB manufacturer which gave up the ghost had the problem solved. Stoner's sideband-only radio employed a gadget they called a "hot diode." Its purpose was to limit a strong signal before it ever got into the radio's circuitry. It permitted no signal stronger than the voltage required to provide S-9 to hit the radio-regardless of the frequency of the offending signal.

If someone has an old Stoner or has a print-or better yet, knows a former Stoner empoyee who'd share the secret with us...

Thought Waves continued

If there's only one local base tearing up the works, a notch filter, such as the one made by Grove Enterprises (they call it a scanner filter), will solve the problem.

Anyone smart enough to design an RF Zener diode?

Don't be too harsh on the scanner manufacturer-they're building a home entertainment device at what I consider a fair price.

John Dorsey
VA 078

To the Editor:

Tim Day (CAOR 229) hit the nail on the head when he stated we should all be aware of each other's problems concerning Electra products. I own a BC 250 and after many letters to the Customer Service Dept. I did receive a replacement Scanner at no charge. Now this replacement is beginning to present difficulties. If we all pool our efforts we should be able to get Electra to improve their products and their customer relations. Should you like complete details on my problems with the aforementioned company just drop me a line and I'll be more than happy to share them with you.

Sincerely,
Marcus V. Ard, SC 019
304 Egret Circle, Belle Isle
Georgetown, SC 29440

To the Editor:

I would really like a computer column. Personally, I'd like to see programs for compiling frequency lists, and perhaps a facsimile of Police dispatching by computer that many departments use, i.e. following cars from incident to incident and the like. Perhaps the computer column could make suggestions for us unenlightened on what computer to consider. Since the 'Monitoring and the Law' column doesn't seem to draw much interest, a computer column could take that space.

I hope you continue to print letters and spark some thoughts for your column. I enjoy a controversy every now and then, and since I only know a handful of RCMA people it is interesting to see what other people are thinking.

Thanks for your prompt answers on my letters last spring,
Casey

P.S.-How about throwing out the idea for a new cover for a new cover illustration on the newsletter. Most helicopters can't hover for that long!

ASSOCIATION OF NORTH AMERICAN RADIO CLUBS

NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.

For an annual subscription to the ANARC Newsletter, send $5 to:
Joe Barr, 1500 Bunbury Drive, Whittier, CA 90601. ($8 overseas subscription.)

ANARCON 1984 - The celebration of ANARC's 20th anniversary, July 20-22, will be hosted by Ontario DX Assoc. For more information, send an SASE to ODXA, 3 Camrose Cresent, Scarborough, Ontario M1L 2B5, Canada.

Central Maryland Dx Assoc. meets on the 2nd January of each month. For information, contact Tony Kobylski (301) 563-0039.

There has been a disruption of the usual ANARC feed of news, hence a very short contribution this month. If we can obtain up-to-date information in the future, this column will continue - if not, the column probably will not continue.

Aircraft

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:

Darrel Charest, 1804 D Oak Creek Lane, Bedford, TX 76021

During those cold, dreary, December days putting together this column is a pleasant, relaxing experience. Unfortunately, this is one of those crystal clear, bright sunshine days with the temperature headed for the upper 60's, and my willpower is being taxed unmercifully as my golf clubs stare at me from the closet.

Some of you may recall that our December Newsletter quoted annual salaries and flying hours of American Airlines flight crew members, and were probably thinking how much you would like to have a job like that. One of our members, a Captain for Pan American Airways, wrote to give us a different insight on the short hours and big money. He reports that "If this job paid as much money as the newspapers and public say you make, and if this job had as much time off as your neighbors think you have, and if this job offered as much xxxxx as your wife thinks it does, it would be one hell of a job!" As for Pan Am, the highest paid B747 International Captain made slightly over $100 grand but that included maximum overtime and expenses. As a B727 Captain, our member worked 82 flight hours last month, with 245 hours on duty time, 8 hours of training without pay, and was away from home a total of 349 hours. He goes on to say that he took a 37% pay cut two years ago with a pay freeze and in 19 years (10 as Captain) he has never made over $80 including expenses and overtime. In my opinion, I feel certain this version of pay and hours of duty is far closer to the real life situation than that previously quoted for American Airlines. All things considered, however, it is a great job with some superb benefits and I envy the young pilots that I'm training today for the flying profession.

Gary S. Brown, OH-90, mailed an interesting article that appeared in a British publication "New Scientist" entitled "How Russians and radio hams tune in to cruise". Gary also pointed out that in Great Britian it is illegal to persue the hobby we enjoy - monitoring. The article appears at the end of this column.

Kevin Freeman, Ellsworth AFB, S.D., wrote to ask if there was some way his Bearcat 300 could be programmed or converted to receive the UHF channels used by aircraft at his base. After a telephone conference with our Space Editor, Larry Van Horn, all we could offer Kevin was to consider purchasing one of the commercial UHF converters that are currently on the market. If any of our members have other advice to offer Kevin, I'm sure he would appreciate writing to him at: 229 Barrentine Way, Ellsworth AFB, S.D. 57706.

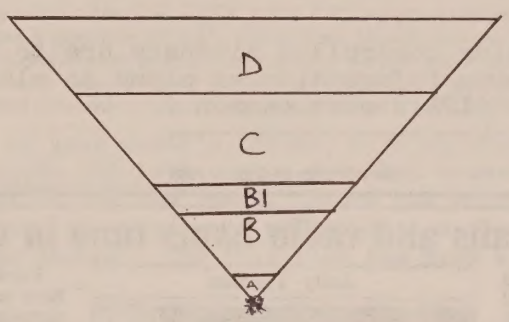
Cliff Polkinghorn, CA AL 029, our Communications Profile Editor reported hearing the local NEWS RELAY of KGO RADIO AM when they began discussing "In flight" promotional pictures. KGO operates both fixed wing and helicopter aircraft and both were being photographed. Cliff said when the helo pilot advised everyone to switch to 124.3 he also changed. Cliff said he monitored the channel as the KGO aircraft, KGO helo and Photo aircraft discussed speed, altitude and back ground situations, and that all remained on 124.3 until the shooting was finished. Cliff thought our members might find this interesting since he didn't find many allocations of frequencies in the 124 or 125 Mhz area. My guess, however, is the pilots selected at random what they considered a clear channel for their work.

Last month's column included a great deal of material provided by our Canadian Editor, Rob Berezowski. Among the items he forwarded was an excellent description of the air traffic control system. Some of the items may vary slightly from procedures applied in the U.S., yet I'm afraid any attempt to clarify these descriptions technically would dilute their obvious value. We all look forward to hearing from you again soon.

Aircraft continued

For those of you who are not familiar with (or,Heaven forbid,do not listen to!!!!!) the Aircraft band then maybe a brief,simplified explanation of how it works. Apologies to any members who might be A.T.C. people or those intimately connected with the aviation industry.

Take an airport as being the centre of a large circle and invert it so that it looks like a cone,point down.



A- Any GROUND FREQUENCIES not connected with actual flight.

1) CLEARANCE DELIVERY -Routing of an aircraft from point A to point B.

2) GROUND CONTROL -Any action or movement of an aircraft or ground vehicle on the hardstand, taxiway etc. including, start up - pushback- taxi (if departing) or clearance to the gate/parking area (if arriving). Taxi to the start line of active runway

B- TOWER CONTROL -any activity concerning the active runway take offs, landings, permission to enter the circuit etc. Visual control zone approx 8- 10 miles(12 - 16 km) from airport.
-some Towers, at major airports, are equiped with radar for initial entry of an aircraft (mostly "light aviation") into the control zone and operate on a separate frequency from the visual tower.

B1- PRECISION APPROACH -During poor weather an aircraft can be "talked down" to the threshold of the active runway by a precision radar controller. The actual landing is still the responsibility of the aircraft Captain. This is a great procedure to watch on the radar scope and lovely to listen to,if you have the chance.

C- APPROACH CONTROL -Initial approach into a control zone, by an aircraft, at approx 10,000 ft and 75 - 100 miles out (depending on the airport) Radar controller hands aircraft off to Tower when vectored onto runway heading and approx 8 - 10 miles out at 3000 ft (under normal visual conditions)

DEPARTURE CONTROL -Initial ascent into the control zone by an aircraft leaving runway. Radar controller vectors aircraft onto course and maintains correct rate of climb to assigned altitude

D- CENTRE -The largest area of responsibility for an AIR TRAFFIC ZONE. Radar controller is responsible for all overflights (high altitude), "on route" departing and arriving aircraft. Hands off or receives aircraft from/to another traffic area.

Aircraft continued

Might well be quite a number of frequencies for this responsibility split up by several controllers

E- ATIS - Automatic Terminal Information Service. A recorded message detailing weather conditions, runway in use, any important NOTAMS etc.

Those airfields not having controlled airspace are to be found communicating with runway information or plane to plane on one of the UNICOM frequencies (122.8 most common)

New Scientist 20 October 1983

How Russians and radio hams tune in to cruise

Andy Thomas

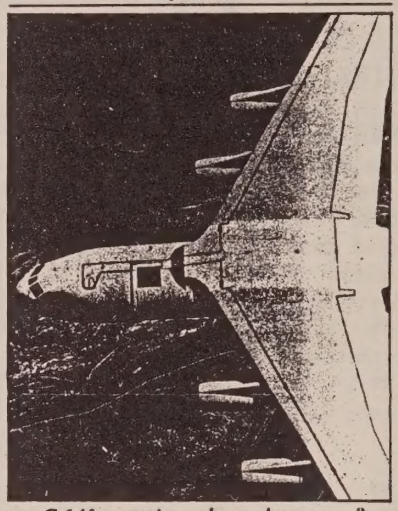
WHEN the first US aircraft carrying cruise missiles touches down at Greenham Common air base later this year, the British people will be the last to know. But signals intelligence officers working behind the Iron Curtain will be fully informed of the origin and destination of the missiles, their estimated time of arrival, the amount of explosives they contain, whether there are any technical problems, and even what the weather is like at Greenham on the day in question.

They will pick up this information by listening in to short-wave, high-frequency signals that the planes send to British ground stations such as Croughton in Oxfordshire.

The planes that will carry the missiles belong to the Military Airlift Command (MAC) of the US Air Force. They will depart from military airfields such as McGuire air base in New Jersey.

The pilot will be told that his destination is Echo Golf Victor India (EGVI), the code for Greenham Common. The message will read something like this:

"Roger, this is MAC 00023 we're a Charlie one forty one, the Alpha Alpha Mike mission out of McGuire, estimate arrival Echo Golf Victor India for 1530 Zulu. We have 68 000 pounds hazardous cargo, requiring special handling, 2000 pounds net explosive content. We have negative mail, negative passengers and our maintenance status is Alpha One. Copy?"



C-141: carrying a hazardous cargo?

Russian signals intelligence officers will have no problem deciphering what the message means: the plane is a C-141 Starlifter freight plane, number 00023 leaving McGuire on a mission to supply Britain with a cargo of explosives that requires "special handling". The destination is EGVI, which anyone who has a *Flight Information Handbook* (£2 from the RAF) knows is Greenham Common. The RAF also supplies a list of frequencies in its *En-Route Supplements* for people who want a little extra help. For example, aircraft communicating with Greenham, or the American airbase at Incirli in Turkey, talk on the 11176 kilohertz upper side band.

Because electronic coding is too troublesome for peacetime use, most routine military messages are in simple code. Even during the Falklands war, British pilots transmitted in plain English. Just as the Soviet Union can pick up short-wave radio messages from halfway round the world, so can the amateur radio enthusiast, with equipment costing no more than £300. The problem in Britain is that the Wireless Telegraphy Act forbids anyone to listen in to non-public transmissions. Anyone who does so (except, presumably Russian intelligence officers) risks a heavy fine. □

Joe M. Lewis, from Dunedin, Fla gave us the following frequency listings.

Tampa, Florida

Air Florida	128.9	460.65
Northwest Orient	128.975	No UHF
Air Canada	129.05	460.7
United	129.3	460.725
Delta	129.5	460.825
Peidmont	129.75	No UHF
Delta	129.9	
Pan American	130.0	460.85
U.S. Air	130.075	No UHF
Northwest Orient	130.35	
TWA	130.625	No UHF
Eastern	130.725	460.75
PBA	131.1	No UHF
Pan American	131.25	(Miami)
Dolphin	131.475	460.775
Republic	131.75	460.875 Orlando
Fed Express	131.925	461.225
Dobbs In Flight		151.715

Larry Van Horn, Space Editor provided the following for the Dallas/Ft Worth area.

American Airlines	129.0	Maintenance
DFW Airport	129.05	Operations
	129.225	Load Control
	129.325	Departure Gates 14-27
	131.025	Departure Gates 28-39
	129.825	Ramp Control
	131.050	ACARS
	131.125	Dispatch
Delta Airlines	129.5	DFW
Eastern Airlines	130.7	DFW
Southwest Airlines	129.25	(Dallas Love Field)

Joe reports these changes for Washington National Airport

Mariott In Flight	151.955	(changed from 151.835)
Sky Chefs	151.955	
D & H Shuttle Bus	154.515	

BELOW 30 MHZ

Robert Horvitz, editor

This column is for AM, SSB, RTTY, CW & FAX reception reports, explanatory notes, articles, news & questions related to HF utilities. Services covered in this column include civilian aeronautical, coastal/marine, government, military, weather, etc. – essentially everything except broadcasting, CB & amateur radio. Send to: Robert Horvitz, 54 East Manning St., Providence, RI 02906
If you need a reception report form, please enclose a SASE with your request.

Right after I mailed in last month's column, with my minor Grenada-related monitoring report, Daryll Symington (OH-149) sent a detailed transcript of some extremely exciting things he heard in the ham bands. Since ham communications are not protected by Section 605, this is one of those rare opportunities where we can share the actual details of history in the making. The following has been edited down from a 4-page print-out.

GRENADA INVASION TRAFFIC

This is a synopsis of a series of conversations which took place on October 25, 1983, during the American invasion of Grenada. The principles are an amateur (ham) radio operator named Mark Barettella, who is a student at the medical school on Grenada, and several other amateur stations. The conversation began at 1620 Zulu, and they faded out around 0330 Zulu the following morning. They started on 21375 USB in the 15 meter ham band, and switched later to the 20-meter band. They then moved out of the American portion of that band due to continous interference from media-happy U.S. ham operators. Some of the "official" net control stations (NCS) that kept the thing going were: W4PPC, KC2PK, K0IND, W4CZW, N2DRA & K4DMK. Others in the conversations with them were XE1DCT in Mexico City; KA5ACT, Fort Hood, Texas; and W1ZLG:

1620 hrs: KC2PK is net control. W4PPC states he has the State Dept on the line, and they want to talk to Mark. He stated that Bruce McKensy from the Grenada Task Force was on the line, then it was switched to Joe Salah from the task force in Washington. A phone patch was set up, and Joe Salah talked with Mark direct:

Joe: What's the situation there?

Mark: No ground fire at this time. There are jets overhead. We are on the Grand Anse portion of the medical campus.

Joe: Is the fighting getting close to the campus?

Mark: Yes. There is quite a lot of ground fire on the grounds just outside the campus - snipers. There are no large numbers of Grenadian forces. The road down by Veronica from the True Blue campus had large amounts of ground fire about 45 minutes to an hour ago.

Joe: We are moving in reinforcements now, and are hoping to reinforce quickly.

Mark: We are in building 1, close to the water on the beach. The other building is evacuated.

1955 hrs, Mark: Relay to Bayshore: The True Blue campus is under mortar fire. All the students are under the tables. The situation is not stable. We can see 6 landing craft offshore. They are rather far out. There are 205 people off campus, and not all of them have been contacted.

2004 hrs, KA5ACT: This is Fort Hood in Kileen Texas. He have the White House on the line. Pass any traffic you may have. We have the Military Liason Officer on the line.

Mark: The True Blue campus is under mortar fire. (Gave him the 1955 hrs report). No military seen here.

2036 hrs, KC2PK: We have a message from State: Help is definitely coming.

Mark: The students are relaxed right now.

2037 hrs, Mark: Message for State Dept: Just in from the True Blue campus - we have a load of incoming wounded. U.S. troops and 28 Grenadian civilians only. No Grenadian troops. 6 Americans have been medivaced out. The mortar fire has stopped, the position has been knocked out. No fire is being directed at the True Blue campus. No rounds fell on the campus. A hospital has been set up at the library and the resident advisor is assisting. There is a physician Captain attempting to find a Sergeant that was sent to town earlier.

2126 hrs (approximately): A Health & Welfare Net was set up on 14303 KHz in the 20-meter ham band. This frequency (21375) is for emergency out-going traffic from Grenada ONLY. All others move to 14303.

2143 hrs: Mark and the Net Control Station (KC2PK) switch to 14250 due to fading band conditions on 15 meters.

2145 hrs, Mark: It has been quiet for the past 1 to 1 1/2 hours. We are still on generator power.

2147 hrs, Mark: No word on the Sergeant. As of 5:43 PM, Cuban physicians are in the small lecture hall treating Grenadian civilians. The generator at True Blue will not operate. A Medivac has arrived with an Air Force Colonel.

2150 hrs, Mark: Report from True Blue: The airport has been secured for landing jets. One jet is on the ground. There is sporatic sniper fire at the Port Salinas airport. The resident advisor at True Blue wishes to use a medivac to evacuate the students.

2346 hrs, Mark to K1CPK who has the State Dept on the line: We are on generator and have the lights out in the entire campus. There was some commotion outside. We have heard some jets approach and leave, but they did not pass over. We are ready when you are. We are in building 1 next to the water. The Cubans are coming over Pearl Airport. The Rangers report that they will eliminate them. This was from Doctor Christianson at the True Blue campus. We do hear jets approaching & fading. They don't get very close.

0007 hrs, Mark: It is very quiet outside, we can hear the ocean.

0012 hrs: Everybody switches to 14140 KHz, after getting special permission from the FCC to do so. They did this because there were many U.S. operators breaking in and disrupting the frequency, asking for interviews because they had some news media on their line wanting information. Several appeals had been made to these other operators to stay off this frequency, and the continual discourteous use prompted one authorized station to say "My God, what kind of amateur radio operators do we have in this United States!!". Also, at about this time there was a quick flurry of CW from unidentified stations, which said "Yankees go home DE WAR", and "Latin pigs go to Moscow".

0017 hrs, Mark: Everything is still quiet, and the dogs have stopped barking. Haven't heard any planes for quite a while.

0042 hrs, from NCS: Turn on 1 spotlight on each corner of the North end of the building.

0051 hrs, Mark: We have checked out the situation. The bldg we are not in has lights on, and we cannot eliminate them. We have no lights on in the building we are in.

0255 hrs, Mark: We are on the secondary generator now. Can't tell how long it will last. It is outside, and that is some-

Below 30 MHz continued

place we don't want to be. After this one goes, we have a very small generator that will power the radio only. The radio is a Swan 500K.

0301 hrs, Mark: No military personnel has reached the Grand Anse campus. It is a Honda 500 watt generator. We have had telephone communication with the military.

0314 hrs, Mark: The administration has made a decision to decline any interviews.

0316 hrs, Mark: The generator working now has about 4-6 hours left.

0322 hrs, Mark: We have anti-aircraft fire somewhere in the St Georges area. It is pretty continous. There is distant jet noise. Very little ground fire.

THE ENTIRE BAND FADED OUT THEN, AND NOTHING ELSE WAS HEARD.

Somehow "thanks" seems too weak a word to acknowledge this report. Daryll edits the "Northwest Ohio Happenings" column for the All Ohio Scanner Club - which also has a "Below 30 MHz" column (clever title!) edited by Bob Leary. See the "Calendar" section of the Newsletter in your hands for the address for joining AOSC.

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Info-Tech M-600A Multi-Mode Code Receiver: A Review

by John Lee Wilson: Five years ago I purchased what was then state-of-the-art RTTY equipment, including a HAL ST-6000 demodulator, RVD-1005 character generator and a 9-inch Motorola video monitor. (My receivers were a Drake DSR-2 and a Collins R390A.) Although the HAL equipment performed well, it had its limitations. Maximum Baudot copy rate was 100 wpm, there was no provision for reception of nonstandard frequency shifts or bit inversion, and the wpm sampling display was at times unreliable.

When the Info-Tech M-600 was introduced last year, with many features that the HAL equipment had lacked, I considered purchasing one. My main concern was potential "bugs" in a new product. This spring, with the introduction of the M-600A, I decided to take the plunge. The unit has been in frequent use during the past 6 months, and as with most products, there are things I like and things I don't like. On the plus side, the unit is well-made, lightweight and 100% solid state. It has a metal cabinet, generates negligible heat and operates stable under continuous duty. Reception mode and other feature selection options are chosen by means of a 4x4 key-pad on the left front side of the unit. Selecting "A" activates ASCII rates. Great - except there are no HF ASCII RTTY transmissions of which I am aware. (However, there are some on the 2-meter ham bands and certain audio/data satellite transponders. Except for the ASCII subcarrier transmissions on "Showtime" from Satellite F3R, which are above the M-600A's maximum ASCII rate and thus uncopyable, I have not yet tried to receive them.)

"B" activates the Baudot cycle. Rates are 40, 45, 50, 75 and 100 - equal to 60, 66, 75, 100 and 132 words per minute, respectively. "1" activates correctly in "B" mode only and the RTTY signal is diverted to a Baudot rate sampling circuit. This is a nice feature as it minimizes the guesswork involved in selecting the proper baud rate. However, be warned that imprecise tuning will affect the reading, and the reading obtained in "reverse" signal position may be different than the "normal" position. During the sampling cycle all signals stop being displayed until the rate is displayed on the terminal: "BAUD = ". The rate display is dependably accurate.

"C" activates CW processing, automatically selecting the "MED" speed range. CW copy rates range from 5 to 120 wpm, but most HF reception appears to work best in the "MED" position. Precise tuning of CW signals was more critical than I had expected. The manual advises to peak the CW LED and set the level control to where the last LED bar flashes. I found that it is difficult to peak an irregularly-flashing LED that also lights when only noise is present. Secondly, I found that adjusting the level control on the 3rd LED bar from the end gave better - and in some cases, the only - copy, even though the signals were strong. I'm still trying for a better "quick and dirty" tuning method. Knowledge of Morse Code will be an aid in tuning.

In regards to receiving bit inversion and SITOR transmissions, so far I have not located any, except for SITOR transmissions in a "frequency mark" mode.

On balance, I like the various features on the M-600A. Its physical dimensions (cabinet is 3½" high x 16-3/8" wide x 10-3/4" deep, not including rack handles and rubber feet) make it easy to install, and it can interface with most commonly available computer type printers, if hard-copy output is desired. In addition, an output jack is provided for a scope connection. I found this to be a valuable help in the fine "peaking and tweaking" required by RTTY. With use, in time, one can recognize and identify

various cycle shifts by the displayed scope patterns.

There are some things which I consider to be deficiencies in the unit, but they are minor. First, a built in 1-inch scope would be a welcome addition for tuning purposes. Second, the positioning of the LEDs above the LED tuning bar is confusing. The "power on" LED could have been located somewhere else on the front panel, and it would have been better to separate the "buffer full" LED from the "mark", "space" and "limit" LEDS. (My solution was to cut two small circles of electrical tape and cover up the distracting LEDs.) Third, I find the LED signal strength tuning bar type of display less helpful than an analog "S" meter. Fourth, the lack of reference marks around the "variable cycle shift" tuning knob means that the user doesn't know - other than by guessing - what the cycle shift is when receiving a nonstandard-shift signal (the leftmost setting seems to be about 150 cycles, the rightmost about 1000 cycles). Silk-screening four or more reference shifts around the knob would reduce uncertainty.

When tuning in an LSB RTTY signal, the first correct combination of "mark", "limit" and "signal" settings will almost invariably not indicate a "space" signal being present. One must tune upward in frequency until a second peak is reached. Unfortunately, at this peak, the mark, limit, signal and space appear to be weaker. (This may not be due to the M-600A per se but to the characteristics of my receiver.)

A final caveat: when tuning in a RTTY signal, be sure to have both "mark" and "space" LEDs showing before "1" is pressed to display the sampled "words per minute in Baudot". If the mark, space or signal-strength potentiometer is turned all the way to the left, the sampling will be blocked, and no message text will be displayed until the sampling cycle is finished. The only way I have found to unblock the sampling feature is to cut the power off, then back on and retune.

As any RTTY monitor knows, receiving RTTY can be very rewarding - and very frustrating. RTTY is unforgiving of erroneous tuning. The Info-Tech M-600A is more or less the state of the art nowadays, and would be a most welcome addition to most serious monitoring setups.

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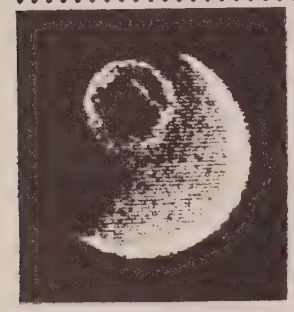
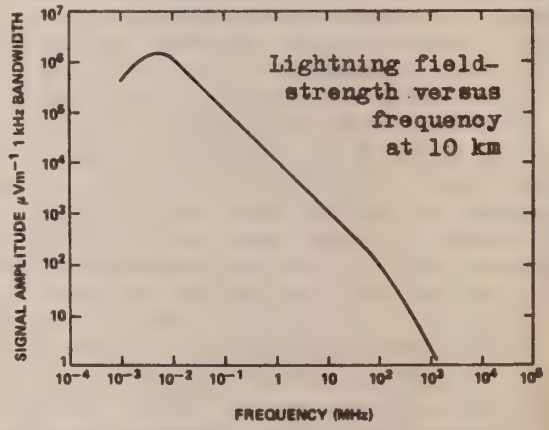


Special Feature: Electromagnetic Weather

Some dramatic images of phenomena affecting HF propagation have appeared in the past few months. Perhaps the most beautiful was on the cover of the Sept issue of Scientific American: a satellite view of the auroral ring around the North Pole. Inside that issue there was a sequence of similar views showing the development of an unusual bar line across the ring, including the view at left. These illustrated an article about the earth's core, whose dynamics generate the Earth's magnetic field. The images are based on ultraviolet-band data from the Dynamics Explorer I satellite.

Another view of the aurora - from the USAF's HILAT satellite - appeared in the 23 Sept issue of Aviation Week & Space Technology. In glorious (false) color, it showed the auroral ring across northern Canada dissolving into the approaching line of sunset.

Though the aurora is only occasionally visible down here in the "lower 48", both satellites show it as a more or less stable feature of the polar region - sort of like an ionic Jet Stream. Last summer, Radio Netherlands' excellent communications program, "Media Network", said that scientists had found an aurora-like ring high above the Earth's equator (I haven't seen this confirmed in the literature). And did you see the images from the Infrared Astronomy Satellite - of gas clouds condensing into stars and the dust ring around the Sun? As we learn how to "see" wavelengths outside the visible spectrum, the world just gets amazinger.



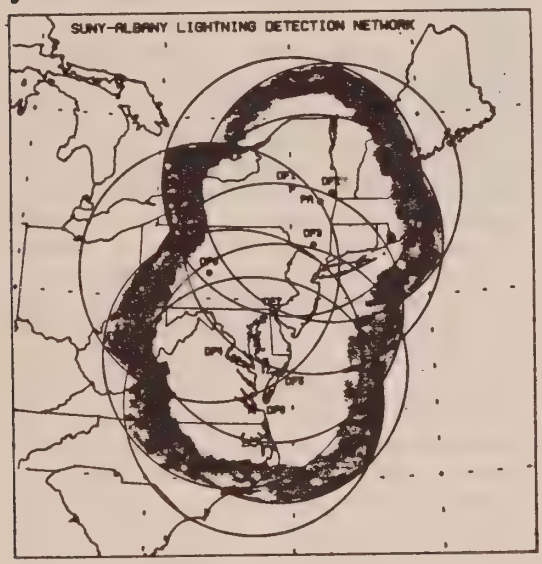
Lightning field-strength versus frequency at 10 km

Lightning is a common and unwelcome part of the HF environment. Many's the time I've heard what seems like every thunderstorm in the hemisphere while trying to copy some faint wisp of a voice below 5 MHz. And in case you haven't noticed, when something irritates me, I study it! The best single source of up-to-date lightning info I've found is titled "A Review of Natural Lightning: Experimental Data and Modeling" by Martin Uman and Philip Krider in the IEEE Transactions on Electromagnetic Compatibility (May 82). This is a 33-page tutorial with a huge bibliography. It leads off a special issue devoted entirely to the interaction of lightning with aircraft, so the whole issue is relevant. The graph above is from that article and shows why lightning is so audible at lower frequencies: it's field strength increases tenfold as one tunes from 10 MHz to 1 MHz.

Modern instrumentation has revealed alot of the fine-structure of lightning, but not all of the observed processes are understood yet. Some details from the tutorial: more lightning flashes occur within and between clouds than between clouds and the

ground. Both types, though, have about the same RF amplitude distribution above 100 kHz. Maximum amplitude, as the chart above shows, is in the 5 kHz range. Just before the initial VLF pulse, there is "appreciable VHF radiation from the cloud which is probably produced by localized processes that involve relatively small charge transfers." As the breakdown progresses, a "leader" stroke of electrons is channeled toward the ground "in a series of short luminous steps". The current of a typical stepped leader is about 100 amps. As the leader tip approaches the ground, a "return stroke" propagates upward to meet it. The return stroke is much more powerful - peak current is typically about 30,000 amps. It travels up the already-ionized leader path at about 1/3rd the speed of light. When the current reaches the cloud, it can trigger another discharge, which in turn produces another powerful return stroke. A typical flash of lightning is actually made up of 3 or 4 very brief high-current discharges. There is some evidence that "much of the RF emission may be due to the effects of branches in first strokes and cloud processes. Supporting this suggestion is the observation that subsequent strokes, which usually do not have branches, generate little HF or VHF radiation..."

Uman and Krider focussed on "natural" lightning. The second article in the special issue focussed on lightning induced by tall structures (towers, mountains), aircraft and rockets. The first documented case of lightning being triggered by a tall tower, according to Clifford and Kasemir, was published in 1939. High-speed photographs of lightning strikes to the Empire State Building showed that in all but a handful of cases, the leader stroke moved upwards. "Pierce summarized data from several sources on the incidence of lightning flashes to tall structures and deduced that structures less than 150 m high do not trigger lightning, although they may be struck frequently by naturally occurring lightning. However, with increasing height there is a very rapid increase in the proportion of flashes initiated by the structure; for a structure height of 200 m, it is about 50%, and at 400 m it exceeds 80%." Of course, it matters little if your antenna triggers the stroke or is just its target. Either will fry your receiver.



The Bulletin of the American Meteorological Society (Sept 83) had an article describing a recently-built network capable of detecting and locating about 80% of all the cloud-to-ground lightning strikes "from Maine to North Carolina and as far west as Ohio." The coverage area is everything within the fuzzy oval in the chart at left, with less complete coverage of the adjacent circled areas. Richard Orville, Ronald Henderson, and Lance Bosart, at the State University of New York at Albany, who manage the network, write:

"The lightning direction-finding system...is now manufactured by Lightning Location and Protection Inc., Tucson, Ariz. The basic system consists of two orthogonal magnetic-loop antennas, a flat plate antenna, and associated electronics to process the incoming signals. The bandwidths of the antenna systems are wide (approximately 1 kHz - 1 MHz) so that the shapes and polarities of the lightning field waveforms are preserved... The first lightning DFs were installed in New York in the spring of 1982. Additional DFs were added throughout the summer to bring the total to eight by early fall. Two more were installed during the winter of 1982-83, and now there are a total of 10 DFs... Figure 1 /above/ shows the locations of the high-gain systems along the East Coast. Three stations are in New York (at Little Falls, Cambridge, and Newburgh), three are in Virginia (at Dahlgren, Wallops Island, and Hampton), one is in Pennsylvania (at State College), and one is in Delaware (at the Greater Wilmington Airport)... Two additional DFs are not plotted in Fig. 1, but are located near Little Falls, NY. These are part of a study of power distribution line performance for the Niagara Mohawk Power Corporation and have low-gain settings and nominal ranges of less than 100 km. All 10 DFs are

Numbers news from Geoff Halligey: "I had a listen around last evening (16 Nov), and between 2042 and 2119z, I heard no fewer than 12 stations between 4780 and 3150 kHz. They are getting busy! Three of them were in Czech - using 'jedna' for 1, instead of 'edno' as in Bulgarian - otherwise the languages are similar. I heard two words for ø - one sounds like 'noah', the other like 'nula'. Strangely enough, the dictionaries in our libraries here give 1 - 10 but they all omit ø. Another new development is the introduction of the word 'trennung' in one of the German numbers transmissions. My little dictionary gives 'trennen' as 'divide', which figures, as the word is used thus: 'ein zwei drei fier funf trennung sex sieben' - in other words, five figures, trennung, then two figures, all sent as one group. I noted this as 5#-T-2# in my 3820 kHz logging /below/."

Below 30 MHz continued

controlled by a position analyzer microcomputer that is located in the operations room at the State University of New York at Albany. Communications between the position analyzer and the DFs are over a full duplex, 2400 baud, synchronous-leased circuit that operates continually throughout the year. The position analyzer monitors the status of each remote DF and the data link by polling the DFs at a rate of 5 stations per second. When a DF senses a lightning ground flash, the signals for up to 14 return strokes are processed by the DF microcomputer... When two or more DFs record a flash within a programmed time interval (typically 40 ms) the location of the flash is computed and plotted. The data associated with the flash also are displayed on video graphic terminals, recorded on nine-track tape, and typed on a local data terminal."

The map at right shows the lightning flashes recorded by the system during an unusually severe thunderstorm. The authors observe that "the time rapidly is approaching for the real-time acquisition, display and analysis of lightning data as part of our daily weather forecasts."

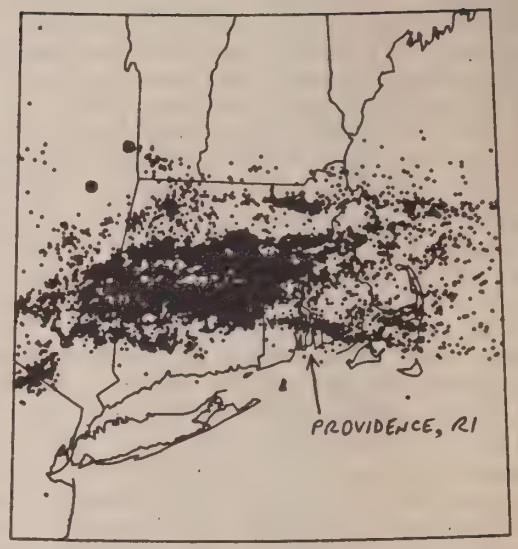
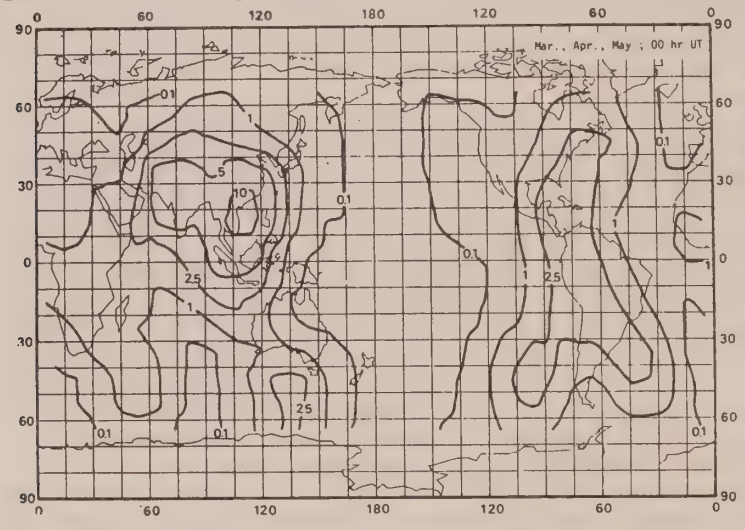
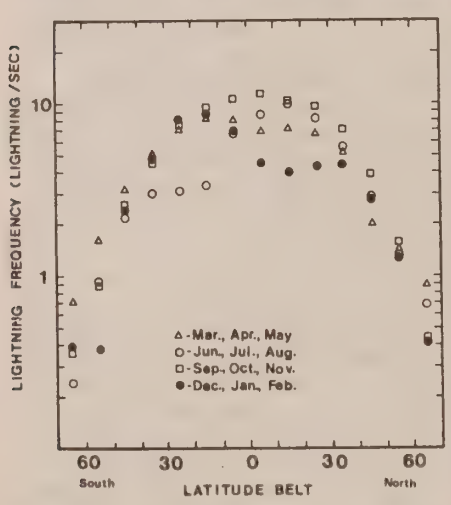
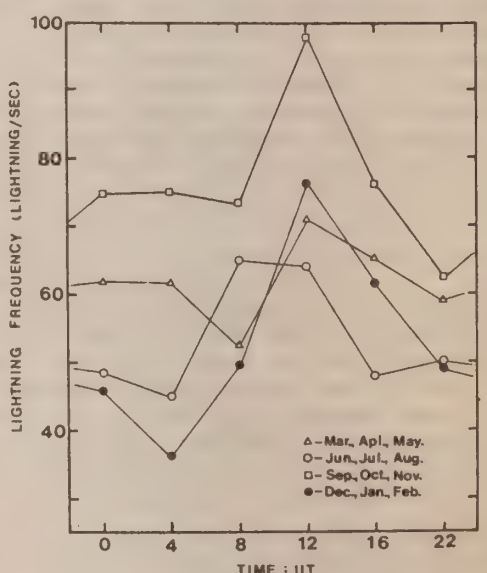


FIG. 3. A cumulative plot of 7456 lightning ground strikes from 1800 GMT 8 October to 0400 9 October. (From the SUNY-Albany lightning detection network.)



The best article I've found about the distribution of lightning worldwide is "Global Distribution of Thunderstorm Activity Observed with ISS-b" by Minoru Kotaki and Hidetoshi Sugiuchi, in the Journal of the Radio Research Laboratories (Tokyo, March/July 81). This also appears in a special issue - devoted to the results obtained from the Ionosphere Sounding Satellite-b, which was launched from Tanagashima, Japan, in 1978. ISS-b had a nearly circular orbit about 1100 km up, inclined about 70° relative to the equator. It had two dipole antennas measuring 36.8 m and 11.4 m from tip to tip. The longer dipole fed two narrow-band receivers, one tuned to 2.5 MHz, the other to 5 MHz. The shorter dipole fed receivers tuned to 10 and 25 MHz. (There were also antennas for telemetry and command, using channels at 136, 148 and 400 MHz). The receivers were designed to pick up RF noise. Scientists on the ground culled out data contaminated with man-made signals, using the remainder to, among other things, plot the impulse discharges caused by lightning. The chart above shows average worldwide distribution of lightning at 0000z for the months of March, April and May. Multiply the figure on each contour line by 10^{-6} per second & note that in this season the highest rate of occurrence is over southeast Asia - and be thankful you don't live there! The chart at left shows lightning frequency plotted as a function of latitude in each of the four seasons. The chart at right shows the daily variation in the occurrence of lightning in each of the four seasons.



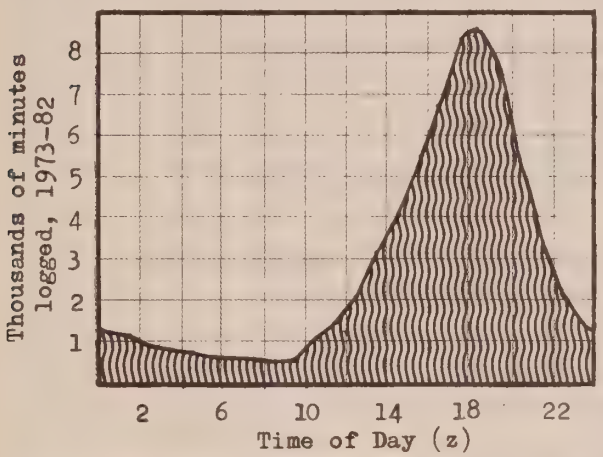


If Weather Recon Turns You On...

Located at Miami International Airport, radio station KJY-74 is operated by the National Oceanic and Atmospheric Administration's Research Facilities Center. It provides air/ground communications between "Miami Monitor" and the scientists and crew who man NOAA/RFC's two WP3D Orion aircraft, which are outfitted for the collection of atmospheric and oceanographic data. Missions are basically either for scientific research or hurricane reconnaissance, and may involve flights thousands of miles long, lasting up to 10 hours. Since they often probe rough weather, maintaining reliable communications is very important. Transceivers on the ground and in the aircraft are "in the 400 watt power output class". In 1982 the ground station switched from a wire antenna to a log periodic. When the new civil aviation frequency assignments went into effect on 1 Feb 83, IRAC gave KJY-74 new freqs, too - see table at right.

KJY-74:	
3407	10015
5562	13354
6673	17901
8876	21937

Having retired their old frequencies (which were 4668, 6645, 8962, 11396, 13260 and 17901 kHz), they decided to analyze their logs to see what freqs and bands had proven most useful under various conditions (time of day, distance, mission type). The purpose was to develop guidance for RFC radio operators in using the new freqs. The study, by Francis J. Merceret, was published last May as NOAA Technical Memorandum ERL RFC-12. I don't recommend that you rush out to buy it, but it does offer insight into their past frequency-use patterns, and what one could expect for the new channels.



Merceret found that more than 1140 hours of air/ground HF communications had been logged over the past 10 years - an average of about 20 minutes a day - but averaging hides the much greater channel activity during hurricanes. Nearly half the total time logged was hurricane-related. The chart at left relates total communication time logged (1973-1982) to time of day.

RFC's frequency use conformed to the recommendations in the Defense Mapping Agency's Flight Information Handbook, Merceret said, "except that at close range (less than 750 nautical miles) we use slightly higher frequencies than they recommend. This is largely due to the environment in which we operate. Our severe weather flying places us in a heavy atmospheric static regime which is worse at low frequencies, so we often use the next higher frequency from that we would use under quieter conditions."

About 40% of the total communications time logged during the past decade was while the aircraft were within 200 nautical miles of Miami. Merceret notes that VHF channels can be used at higher altitudes within this range, but HF must be used for low-altitude missions. Within the 200 nm range, 6645 kHz had been "the frequency of choice at all times of day", except for 2100-2300z, when 4668 kHz had been preferred. Thus, one might expect the nearest new frequency - 6673 kHz - to be the new frequency of choice for local contacts, with 5562 preferred during 2100-2300z. When he analyzed the hurricane-related communications, Merceret found that 13260 kHz had been used about 33% of the time, 6645 29%, 8962 16% and 11396 12%. Thus, we might expect 13354 kHz to be most used for hurricane missions, followed by 6673, 8876 and 10015 kHz. Regular monitoring is about the only way to verify these predictions. Remember that the hurricane season peaks in August and September.

Time of Day	Range (nautical miles) <200	200-500	500-1000	>1000
2300-0500z	6-12	6-10	6-10	11-18
0500-1100	6-12	4-7	4-12	8-14
1100-1700	4-7	4-10	6-14	10-18
1700-2300	4-7	6-14	8-18	12-18

The most useful frequency bands (MHz) at various ranges and times of day, based on KJY-74 logs, 1973-82

Beginning RTTY listeners may find the ubiquitous signals of Miami Aeradio, WBR-70, useful when setting up equipment for the first time. WBR-70 provides continuous broadcasts of coded (not encrypted) weather information in the form of letter and number groups. The station may be heard whenever propagation between Florida and the listener's location is favorable. WBR-70 has been copied here at the following times and frequencies, all in the 850/100N format:

4061.5	0930Z	10,950.0	0400Z	16,440.0	0230Z
5925.0	0930Z	12,175.0	0400Z	18,765.0	0300Z
8130.0	0900Z	13,624.2	0430Z		
8140.0	0900Z	14,853.0	0245Z		

--This paragraph is from Dick Dillman

3071 U 0410 SAM-24127/Andrews--RL
3150 A 2340 6 Nov & 2050 16 Nov: 5L (IPA)--GH
3217 A 2050 16 Nov: tones exactly // to 3150 til 2100z, then 5# in German--GH
3239.5 A 2100 16 Nov: "Noah-Ossem-Pyet" (Ø85 in Czech) repeated, no msg--GH
3258 A 2100 16 Nov: 5# in German--GH
3354 A 2020 6, 7, 11 & 16 Nov: 5# in Czech // 3767, male voice except 11 Nov--GH
3392 U 2308 16 Nov: ## in Czech--GH
3820 A 2100 16 Nov: 5#-T-2# in German--GH
4422.5 U 0507 Passenger ship "Norway" p/p's via WOO--DS
4460 R 1130 LRO-6 (Buenos Aires): news in Spanish, 850/66R--DD
4594 U 2307 13 Nov & 2042 16 Nov: 5# in German--GH
4675 U 0520 Airfreighter-441Ø/Gander--DS
4780 U 2119 16 Nov: "KPA2" call, no message--GH
5598 U 0343 Speedbird-256/Gander--DS
5683 U 0513 Hardrock-34 p/p's via MacDill--DS
5692 U 1900 12 Nov: 3#2# in German--GH
6507 A 0620 20 Nov: 5# in German, each 2x--RH
6577 U 0547 Cabana-477/San Juan Aeradio--DS
6643 U 0305 Red Cross-845 p/p's via Gulf-Alpha-Charlie--RH
6683 L 0219 Air Force-2/Andrews--BR
6715 L 1410 SAM-86971 p/p's via Andrews--RL
6723 U many Charlie-4-Foxtrot/8-Juliet-Yankee/Zulu-2-Yankee/et al.--RH
6745 C 1810 RFNV METAR aero weather broadcast--GH
6750 U 0335 Navy-5Ø496/Andrews--RH
6778.3 A 0730 23 Nov: "Attn 5Ø7-11Ø" 5# in Spanish--RH
6792.6 A 0330 9 Nov: "Attn 536-4Ø" 5# in Spanish--RH
6793 U many 3-Lima-Victor/5-India-Yankee/6-Juliet-Foxtrot/et al.--RH
6830 U 1400 SAM-Ø1/Andrews--RL
6870 U 0035 Courtney calling Equalize--RH
6892 A 0630 20 Nov: "Attn 849-4Ø", same 5# message as 8056 kHz, below--RH
6993 L 1550 SAM-24197/Andrews--RL U 1355 SAM-12496/Andrews--RL
7404 A 1215 10 Nov: 5L (IPA)--GH
7445 R 1000 USIA news (Monrovia, Liberia), 425/100N--DD
7527 A 0520 14 Nov: "Attn 926-129" 5# in Spanish--RH
7887 A 0830 23 Nov: "Attn Ø81-145" 5# "Final final" 0846--RH
8056 A 0612 20 Nov: 5# in Spanish--RH
8903 U 0751 Air Force Rescue-554 p/p Andersen Metro--CC
8906 U 0742 Airvac-64Ø/Pearl-13--CC
8957 U 0826 Italian VOLMET--CC
8984 U 1804 Coast Guard Rescue-15Ø4/Portsmouth Commsta (rescue of the Windemere)--RH
8989 U var. McClellan/Rescue Remote, MAC-6Ø182 & Gold Eagle Center (Texas CAP)--DS
8993 U var. Kilo-48 p/p via MacDill--JH Agnew-Ø4 p/p Format via Albrook--DS Boomerang-4 p/p Discard via Albrook--DS Teal-3Ø p/p Mather Monitor via MacDill--DS Hardrock-34 p/p via MacDill--DS
9007 L 0450 SAM-24127/Andrews--RL
9017 U 1553 SAM-24197/Andrews--RL
9028 U 0653 Hotel-54-Bravo: 3L (IPA)--CC 0323 Gulf-Charlie-9: 3L (IPA)--DS
9120 U 1320 SAM-31681/Andrews--RL
9220 U 0726 Doldrum-2Ø/Doldrum-21/Doldrum-22--RH
9320 U 1543 SAM-31683 p/p Crown via Andrews--RL
9326 A 1752 9 Nov & 1650 11 Nov: 5L (IPA)--GH
9795 L 1338 SAM-12496/Andrews--RL
10296 R 1500 ZRH-76 (Cape Naval, South Africa), 850/66R--DD
10408 R 0100 9VF63 (ANSA news, Singapore), 850/66N--DD
10570 A 0130 4 Nov: 3# in Spanish // 13808.3 & 7836--BR 0230 RFNV aero weather in Russian--BR
10723.7 U 0710 Durand calling Noble Lad--RH
11126 U 0520 Hardrock-34 p/p via MacDill--DS
11130 U 2224 Centauro/Leopardo (in Spanish)--RH
11176 L 2209 SAM-31682 p/p's via Andrews--DS & RH
U many Grand Junction p/p via Albrook--JH Noble Ed p/p's via Albrook--JH Bird-22 r/c Albrook--DS Joyce-63 p/p Format via Albrook--DS MAC-50232 p/p via Loring--DS Serious p/p Wilma-89 via Albrook--JH
11179 L 0155 SAM-24127 p/p Crown via Andrews--DS
11180 U var. Air Force-2 p/p Crown via Andrews--JH SAM-31681 p/p SAM Command via Andrews--RH L 1830 Navy-5Ø496 p/p Andrews--RH
11182 U many Sentry-2Ø p/p Raymond-24 via Scott--RH SAM-86971/Scott--RH Overlay p/p Arizona Pete via Scott--JH Swing-23 p/p Swing Ops via Scott--JH Rat-Ø3 p/p Islander Base via Scott--JH

Below 30.MHz continued

11189 U 1821 Charlie-Charlie/Alfa-Foxtrot--RH
11233 U 2118 Military-5556/Trenton Military--DS
11239 U var. King-65 p/p McClellan Base Ops via McClellan--DS MAC-7ØØØ9 p/p Norton Metro via McClellan--DS
11243 U 1613 Mick Jagger-25/Loring--DS
11246 U many Lightning-14/Lightning Base--RH Blue Diamond-Ø1 p/p Blue Diamond Control via MacDill--JH Air Evac-67953 p/p Andrews Command Post via MacDill--DS Air Evac-651 p/p Pope Metro via MacDill--DS Bamba-35 & Bamba-32/MacDill--DS Joyce-73/MacDill--DS MAC-4Ø631/MacDill--DS
11249 U 1807 SAM-24126/Andrews--RH
11396 U 1808 New York Aeradio/Delta-11Ø5, AL8Ø8, et al.--JH
11460 U 2235 SAM-xx129 r/c Andrews--RH
13204 U 1809 Banger/Balloon, Recall, Appaloosa Command, Radium, et al.--RH
13215 L 1600 SAM-86971 p/p via Andrews--RL
13226 L 1520 Yankee-7-Romeo/Oscar-2-November--DS
13244 U many Air Evac-651 p/p Pope Command Post via MacDill--DS Teal-15 p/p Miami Monitor via MacDill--RH Navy-49667 p/p Old Timer Base via Lajes--DS MacDill/MAC-50264, -50272, -60133, et al.--DS
13247 U var. Spar-76/Andrews--RL SAM-86972/Andrews--RL SAM-31681/Andrews--RH
13248 U 1748 Mike-Alfa/Beograd (in Serbo-Croatian!)--RH
13436 R 1700 Y7A53 (GDR Embassy), 425/66R--DD
13515 R 0400 LRN-22 (Buenos Aires), news in Spanish, 650/66R--DD
13950 L 1530 VPL/AHF-4 (Southcom, Panama)--BR
14638 R 0400 WFK-54 (USIA, New York) news, 450/100N--DD
14901 R 0145 CLN-451 (Prensa Latina, Havana), news, 425/66N--DD
14923 R 0145 BAP-44 (Xinhua, Beijing), news, 850/66R--DD
15015 U many Eggman-1 p/p Grand Junction via Albrook--DS Grand Junction p/p via Albrook--JH MAC-41662 p/p Serious via Albrook--JH
15031 U 1613 Sky King broadcast--DS
16348 R 0230 CLN-53Ø (Prensa Latina, Havana), news, 450/66R--DD
16414.6 U 1813 28 Nov: 5# in German, each group 2x, "ende" at 1818--RH
17966 U 1201 13 Nov: 5L (IPA)--GH
17995 U 2019 381Ø/Edmonton Military--DS Husky-57/Trenton Military--RH
18019 U 1833 Yoke-75 p/p Pope Command Post via Albrook--JH
18027 U 1555 SAM-86971 p/p via Andrews--RL L 1748 SAM-86972/Andrews--RH
18111 U 2000 KM2XDU, KM2XDW & KK2XJN: radio test--RH
18362 U 1456 Romeo-Hotel/Lima-Victor--DS
18471.7 C 1156 AQP8 (Pakistan Naval, Karachi), tape marker--GH
18666 U var. Atlas/Flint-252, -253, -455, -556 & Red Fox--RH
18745 C 1700 WGY-912 (FEMA, Mount Weather, PA): 5L--BR
18788.2 R 0120 SUNA (Kartoum, Sudan), news, 425/66R--DD
19616 R 0350 NBA (US Navy, Balboa, Panama), 850/100R--DD
19918.2 R 0300 NNNØMJI (US Navy MARS, Japan), 170/66N--DD
20318.5 R 0255 FTU-31A (AFP, Paris), news, 425/66N--DD
20350 R 0250 NBA (US Navy, Balboa, Panama), 850/100R--DD
22588 C 1207 WLO (Mobile, Alabama), tape marker--GH
23265 U var. SAM-24127 p/p's via Andrews--RL
23716.5 R 0230 WFG-83 (AFP, New York), news, 425/66N--DD

Abbreviations: A = AM; U = USB; L = LSB; C = CW; R = RTTY 5# = 5-digit groups; 5L = 5-letter groups; IPA = International Phonetic Alphabet (Alfa, Baker, Charlie, etc.); Attn = Atención; / = communicating with; p/p = phone patch; r/c = radio check

Contributors:
CC = Charles Chenery (New Zealand)
DD = Dick Dillman (California)
GH = Geoff Halligey (England)
JH = Joe Holliday (Florida)
RH = editor (Rhode Island)
RL = Robert Leary (Ohio)
BR = Bob Rankin (Kansas)
DS = Daryll Symington (Ohio)

R.C.M.A. Member Gordon West CAOR017, better known as Gordo WB6NOA on the ham bands, made one of the contacts with the Dr Owen Garriot aboard the space ship Columbia. The contact was made on orbit 56-D about 6 pm on 2-meters. 145.010 tx and 145.550 rx. Gordon used 1KW into a pair of KLM 16 element beam antennas. He indicated that he needed that much power to overcome the QRM only and that the 5 watt transmissions from the space ship came in 10-2. Gordon was one of the few Hams in the LA Basin to make a confirmed contact due to the QRM. He chose a low profile 12 degree orbit, and tracked the ship horizontally with his antennas and most importantly stayed on one frequency and stayed on the minute schedule.

Business, Etc.

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufactureers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to: Brandt Niemuth, P.O. Box 541, Rosemont, IL 60018

Greetings from the "Windy City";

Tis the time of year when those PH and PW freqs should be quite active along with the number of hours spent near and/or around your favorite listening hobby - scanners, I hope. To start off, this months column:

From Jim (IL-060);

151.745 KNGG 285 Paltine Township Senior Center Palatine, Ill

From Jeff (IL-064) other Chicago area freqs:

Christ Hospital, Oak Lawn
461.775 KLL 777 Security 43.640 KZZ 614 Paging
Cook County Hospital, Chicago
464.875 KV 2925 Security
Little Company of Mary Hospital, Evergreen Park
462.575 KAB1404 Security 35.64 WQQ 339 & 462.825 KKH 333 Paging
Palos Community Hospital, Palos Heights
462.575 KAB1120 Security 157.45 KLA 545 Paging
Moraine Valley Community College, Palos Hills
151.865 KSV 223 Security
158.46 KVP 537 Physical Plant Paging
*155.19 "312" Palos Hills PD
*154.43 "8120" North Palos FD
* These freqs are for interfacing with the college with "312" & "8120" used as identifiers.

From Rich (PA-027) on the Pittsburgh Three Rivers Regatta:
453.850 Pittsburgh PD ch 6 (Regatta Control)
462.975 Pittsburgh Paramedics - Dispatch 2 Simplex (on scene communications)
155.880 Pittsburgh PW (Regatta Officials)
156.800 Coast Guard Cutter "Osage" (River Control During Races)
151.625 Air Co (Parachuters) - Communications from plane to announcer on ground.
45.04 Pa Fish Commission (River Patrols)
166.250 KDKA-TV 450.050 WTAE-TV
450.250 KDKA Radio 450.0875 WTAE Radio
161.640 KQV Radio 170.150 WPXI-TV

Rich goes on to report that the above info was used during the July '83 Regatta and feels that they will still good for the 1984 event.

From a prospective new member, Robert Shay, by way of Ken Pehl (TX-003) for the Daleville, Ala area;

152.390 Gullage Taxi - Base 157.650 Gullage Taxi - Mobiles

From Arthur (NY-168) by way of Larry (MI-001) comes a report that during the New York City marathon in the fall as well as the Macy's Thanksgiving Day Parade, WABC-TV uses the following:
Marathon, 450.1125 control room to cameramen
161.760 announcers in studio
Parade;450.825 camermen & cuing
(ed note: If anyone can supply added info to this, please send it in)

Business, Etc. continued

From Andrew (MI-136) with a little help from Larry (MI-001)
News Media freqs;

Benton Harbor/St Joseph, Mich

161.67	KQK 823 WHFB AM/FM	450.25	KYY 544 WSJM AM/WIRX FM
161.67	KG 4637 WHFB AM?FM	455.55	KYY 544 WSJM AM/WIRX FM
450.35	KO 2929 WHFB AM/FM	455.65	KYY 544 WSJM AM/WIRX FM

161.7 KXB 250 WCSY AM/FM South Haven Mich

161.64 KAF 396 WSJV TV Elkhart, Ind

South Bend, Ind:
161.76 KSJ 846 & KUC 838 WNDU-TV
450.2875 KFR 846 WNDU-TV
455.7[illegible] KFS 969 WNDU-TV

WSBT AM/TV:
161.7 KLI 395, KLI 396, KSJ 827
450.2125 KQB 337, KQB 338 News (R - 455.2125 in)
450.6125 KEI 594, KEI 997 Engineering (R - 455.6125 in)
455.2125 KQB 338
455.6125 KEI 997
Thank you Andrew for the News Media Material.

Other contributions this column are from Danny (CA-LA-540) and Robert (CA-OR-026). To all contributors, thank you, gentlemen.

From: Robert (CA OR 026)

Additions & Corrections to School Listings that was in the December Newsletter:

ADDITIONS TO THE LIST

ALPHA SCHOOLS	461.575	KNDK434
CALIFORNIA STATE UNIVERSITY(LA)	39.100	
	153.740	
	155.040	
HERITAGE SCHOOLS	154.600	
LA PUENTE HIGH SCHOOL	154.600	KA96604
LAKE HUGHES/ELIZABETH UNIFIED SCHOOLS	33.080	KFH362
LOMA LINDA UNIVERSITY	154.515	KVK917
LA COMMUNITY COLLEGE DISTRICT	155.685	KPZ562
	156.090	
LYNWOOD UNIFIED SCHOOL DISTRICT	464.825	KXK452
NEWBURY PARK HIGH SCHOOL	154.570	
	154.600	
REDONDO BEACH UNION HIGH SCHOOL	151.955	KNDC991
SANTA MONICA CITY COLLEGE	154.650	KNCV305
SIMI VALLEY SCHOOL BUSES	462.550	KAB2458
SOUTH BAY UNION HIGH SCHOOL DIST.	151.835	KNBS709
SLAUSON SCHOOL	154.540	KNBT225
SOUTHGATE JR HIGH SCHOOL	154.540	KFK503
TRADE TECHNICAL COLLEGE	154.540	KNFV594

CHANGE OF CALL SIGNS

AZUSA SCHOOL DISTRICT	151.655	KNBT767
CHAPMAN COLLEGE	464.7875	KB23587
IRVINE UNIFIED SCHOOL DISTRICT	154.540	KNDK292
LA CITY SCHOOL DISTRICT	453.800	KMK876
TORRANCE HIGH SCHOOL	462.075	KNFE304

ADDITIONS TO EXISTING LISTINGS

BELLFLOWER UNIFIED SCHOOL DIST.	462.000	WSZ849
CAL STATE FULLERTON	154.920	KJT553
FULLERTON ELEMENTARY SCHOOLS	852.1125	KNCD382
HUNTINGTON BEACH CITY SCHOOL DIST.	155.265	KSJ598

Business, Etc. continued

LONG BEACH UNIFIED SCHOOL DIST.	33.400	KB23572 & KA92993 thru 997
LOS ANGELES CITY COLLEGE	154.515	KA90236
	154.540	KA90236
	154.725	
	154.740	
NORWALK/LA MIRADA UNIFIED SCHOOLS	453.950	KNAV725
ORANGE SCHOOL DISTRICT	851.6375	KLJ265
SAVAHNA SCHOOL DISTRICT	462.625	KAD2385
UC IRVINE	46.560	
	154.920	
	156.015	
UC LA	154.920	
	155.010	
	462.675	KAD3811
	464.3125	KA78145
	464.8125	KA78145
	506.3375	
USC	464.325	KNFN922

From: Danny O'Brien (CALA-540)

173.275 Paramount Studios Security

463.975 Pedus Security

35.100 Bel Air Patrol

151.955 LA Trade Tech Collage Security

151.925 Western Exterminator Company

452.100/457.100 Beverly Hills Cab Company

461.250/466.250 Home Savings&Loan Security Agents

464.675 ABC Entertainment Center (2020 Bldg)/ABC Pictures Inc (2040 Bldg) (Security and Maintainence. Located in Century City)

464.475 Park La Brea Residential Community Los Angeles (Security and Maintainence)

" " Del Amo Fashion Center Security

" " Pacific Southwest Airlines (PSA) Operations and Maintainence LAX

463.200 Airline Crew Transit LAX

462.050 Western States Security

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to:

Rob Berezowski, 211 Costigan Bay, Saskatoon, Saskatchewan, S7J 3P4 Canada

Welcome all to the Canada column for this month. As I write this in the early evening hours of this day near the end of November, Weatheradio Canada advises a temperature of -16C with a wind chill factor of 1525 watts. Winter is on the way for sure. At the U of S we can almost see daylight. Classes end in just two weeks, then we have finals just for a few laughs. Boy let me tell you, I'm really looking forward to those torture chambers. We also had a reminder of what electrical engineering is really about. One of the fourth years was working in the power lab across the hall from where the third years were having a lecture. We heard a loud bang and we saw a flash. No serious injuries, but the switch and a meter were literally vaporized. The insides were basically gone. As my friend told me, you try to find a lab partner who has more guts than you do. Hopefully he will throw the switch to see if the circuit is correct. (I really should say he or she) (Only 208 volts went through the meter)

Canada continued

To start off with this month I have a list of frequencies that Michel(CAN-017) sent in to me. The frequencies below are used for the Quebec Winter Carnival Parade held in February. The (1) in the list below indicates use in the first parade from Charlesbourg to Quebec City. The (2) indicates use in the second parade from Quebec City to Sillery to St. Foy. The asterisks indicate the channel was heavily used, while (3) shows use in both parades.

Quebec City Police	Routine Operations	XJF96	155.580*	(3)
	Parade Command Channel	XJF96	155.790*	(3)
Charlesbourg Police	Command Channel	XJF213	412.1125*	(1)
	Secondary	XJF213	412.8125	(1)
St. Foy Police & Fire	Command Channel	XJG91	412.3125*	(2)
	Secondary	XJG91	412.9125	(2)
Quebec City Fire Dept	Command Channel	XJG63	154.250	(3)
Charlesbourg Fire Dept		XJG454	154.830	(1)
Police Mutual Aid Channel			171.600	(3)
Sillery Police/Fire Dept		XJG57	155.970	(2)
Quebec Provincial Police (Quebec Metro)		XJC204	167.010	(3)
Abrahams Park Police		XLI39	173.310	(2)
Laval University Security (St. Foy)		XNY43	159.300	(2)
Quebec City Public Works Command Channel		XJK248	169.890*	(3)
Quebec City	Lepine-Cloutier Ambulance	XNX70	158.760	(3)
	J Bouchard Ambulance	XNB963	163.500	(3)
	Tele-Medic Ambulance	CJK917	166.170	(3)
Charlesbourg Ambulance		CJA642	164.370	(2)
Quebec City	LaRouche Towing	CJH652	451.425	(3)
	Belanger Towing	XON597	451.500*	(3)
St. Foy	Rouleau Towing	XON624	164.700	(3)
Quebec City	Amateur Radio Parade Command	VE2UD	146.760*	(3)
	" " " "	VE2UX	146.820*	(3)
	" " " "	VE2OM	146.940*	(3)
CTCUQ Transit Commission (All Areas)		XJJ760	142.755*	(3)
St. Foy	CFCM Television	CJA673	451.375	(3)
	CBC Radio-Canada	CJZ525	149.620	(3)
	CBC Radio-Canada	CJY978	170.150	(3)

Well I hope that this list will help anyone in the Quebec City area during the parade. I do not know the exact date, but I believe it is in February. Thanks again Michel.

Jay(CAN-103) is a relatively new member of RCMA but has been monitoring for about 7 years. He sends in the following corrections to one of my recent columns. Jay says that the Burnaby RCMP Info channel is 142.935, not 142.930 as I printed. Also the CPR Police are on 159.885, not 159.890. Jay also adds the following to the lists I printed for B.C.

Victoria Police	Repeater	155.550
	Simplex/Car to Car	155.490
BC Emergency Health Services		149.590
	Victoria	149.890
	Link for 149.440	414.1875
	Link for 149.830	419.175
T. Eaton Co. (Security Dept)	Simplex	453.0875
Absolute Protection Security Co.	Repeater	452.3125
Robson Square Security	Repeater	461.0125
Vancouver City Fire Dept	Dispatch Link	462.2875
Uniguard Security Co.	Simplex	168.930

Jay has also sent in some information on the Vancouver Police Dept. The 10 codes used are the same as the Province wide 10 codes I printed in the column some time back. Some other codes and jargon that one might find useful to know are listed below along with the decodes.

Code 3	Lights & Siren
Code 4	Emergency/Urgent Traffic
Code 5	Suspect violent towards police
Code 6	Fire Dept
Code 12	Suspect out of earshot of radio
CD	Chief Dispatcher
EHS	Emergency Health Services Ambulance
RNS	Rescue & Safety Unit (Fire Dept)

Routine Metro - Ambulance
Wrecker Tow Truck
MHR Ministry of Human Resources
BTA Breath Test Analysis
MRDS Mobile Radio Data System
HPI Hold Suspect Pending Investigation
2;14 Prohibition - 24 hr Road side Suspension
ERT Emergency Response Team (i.e. SWAT)

I am sure that there are a lot of other terms used on the air, but this list will give anyone a good start. Harry (CAN-074) has sent in the following radio codes for the Edmonton Ambulance Authority.

10-1 Address Check/Location
10-2 Suite number/Hospital Station check
10-3 Call City Police to Location
10-4 Message Received
10-5 Phone Office
10-6 Motor Vehicle Accident (Call from 911 or City Police)
10-7 Account Paid
10-8 In Service
10-9 Walking Patient
10-10 On Location
10-11 Stretcher Patient
10-12 House Call-Patient Sick, Further Information Unavailable
10-13 Patient DOA (Not necessary to notify Hospital)
10-13H Homocide
10-14 Epileptic-Convulsions
10-15 In Shock
10-18 Drunk
10-19 Emergency House Call (Call from City Police or 911)
10-20 Patient Serious, Stopped Breathing
10-21 Heart Attack
10-22 Severe Bleeding
10-23 Multiple Fractures
10-24 Suicide Attempt
10-25 Vehicle Service
10-26 On Stand By
10-28 Labour Problems
10-29 Alcohol Related
10-30 Off Air (Coffee, Lunch, etc.)
10-31 Rape, Sexual Assault
10-33 Maintain Silence - Unusual Circumstances
10-34 Medication Reaction
10-35 Mental Problems
10-38 Sports Injury
10-39 Assault
10-41 Cuts or Bleeding
10-45 Radio Patch to Hospital
10-49 Continuous use of siren - Do not exceed 40 m.p.h, Full Stop at Red Lights
10-51 Emergency Lights only
10-52 Make Haste - No siren, no lights
Code 0 Slow/Caution - Unusual conditions
Code 1 No Lights, No Siren, Make Haste
Code 2 Emergency Lights only
Code 3 Continuous use of Siren
Code 4A Man with a Gun
Code 4B Man with a Knife
Code 5 Out of Service
C.D.A. Cardiac Arrest

Thanks for the info Harry. I'll finish off with some lists from Bruce(CAN-019) for Sault Ste. Marie and Toronto. On the Sault Ste. Marie list there is some material that really belongs in other columns, but I hope the respective editors don't mind. With that I'll close off and wish all of you the best until next month.

NORTH BAY / SUDBURY / SAULT STE. MARIE AREA FREQUENCIES

POLICE (08/82)

42.000*		O.P.P. - W.T. Air to Ground
42.060*		O.P.P. - Bases & Common Car to Car
42.220*		O.P.P. - Mobiles to 42.060 Bases
143.055*	R	North Bay P.D. - XJF 30
142.035*	R	Sudbury Regional P.D.
142.215*	R	" "
142.305*	R	" "
142.695*	R	" "
142.905*	R	" "
142.770*	R	Ontario Provincial Common
142.830*	R	Sault Ste. Marie P.D. - XJF 28
42.580		Michigan State Police - Base
42.560		" " " - Car to Car
42.740		" " " - Mobile
42.680		" " " - Inter City
42.640		" " " - " "
155.865		" " " - MEPS
39.820		" " " & Soo Sheriff
155.415*	R	Soo, Michigan - KXX 374
155.310		" " - KXX 372
155.535		" " - KXX 373
451.1000*	R	" " - WAX 487

FIRE

153.830*		North Bay - XJF 368
153.770*	R	Sudbury - XJJ 35
153.830*		Sault Ste. Marie - XJK 23
154.370		Sault Ste. Marie - XJK 646
154.415*		Soo, Michigan F.D.

AMBULANCE

150.100*		O.H.A.S. Provincial Common
150.485*	R	Sault Ste. Marie
149.605		
155.220		Soo, Michigan
155.280		Michigan Hospital Assn.
155.340		Chippewa Cty. Memorial

RAILROAD

161.415*	R	CN F1 - End to End
161.205*	R	CN F2 - Dispatcher
161.025*	R	CN F8 - TW/VIA Dispatcher
160.785*		CN F20- Maintenance of Way
161.475*	R	CP Fa - End to End
161.175*		CP Fd - Maintenance of Way
160.545		Ontario Northland - E to E
160.995		Ontario Northland - Yard
160.530		Algoma Central - E to End
160.650		Algoma Steel - Yard
161.370		Soo Line - End to End
161.520		Soo Line - Yard

GOVERNMENT

169.290*	Sault Ste. Marie XJI 54
45.520	Soo, Michigan - Streets
45.640	Soo, Michigan
47.260, 151.115	Michigan D.O.T. F2
47.140, 151.085	Michigan D.O.T. F1
48.140	Soo, Michigan Electric

MARINE

156.400 S, 156.375 C	Ch 8, U.S. Steel Supply Boat
156.625 S, 156.600 C	Ch 12, Soo River Control
156.725 S, 156.700 C	Ch 14, Soo Lockmaster
156.850 S, 156.800 C	Ch 16, Distress, Calling
157.050 SC	Ch 21A, USCG Working
157.100 C	Ch 22A, Weather, USCG to Civilian
157.150 C	Ch 23A, USCG Working
157.300 S, 161.900 C	Ch 26, Cdn. Weather
161.650	Marine Weather
161.775	Marine Weather
162.550	WX-1, Weather

TORONTO AREA EMERGENCY SERVICE FREQUENCIES

POLICE (08/82)

42.000*	O.P.P. W.T. - Air-to-Ground
42.060*	O.P.P. #5 District Bases & Common Car-to-Car
42.220*	O.P.P. Mobiles to 42.060 Bases
155.490*	Toronto Harbour Police - XJG 52

Metropolitan Toronto Police - XJF 72

Scout Car (Computer Controlled) System

142.035* R	Toronto	142.695* R	Toronto
142.065* R	Toronto	142.725* R	Toronto
142.125* R	Etobicoke	142.875* R	Etobicoke
142.155* R	Toronto	142.905* R	Toronto
142.305* R	Toronto	142.965* R	Toronto
142.355* R	Scarborough	142.995* R	Scarborough

Monitor System

148.850 / 154.995	#1 Division - West Downtown
148.490 / 155.850	#2 Division - Etobicoke
156.240 / 158.895	#3 Division - North York
155.550 / 159.180	#4 Division - Scarborough
155.400 / 159.300	#5 Division - Downtown Core

Mobile Support System		Investigative Units	
155.520	Base 150 - XJF 901	412.2125	
156.000	Base 250 - XJF 901	412.2875	XJK 737/8/9
155.235	Base 350	412.3625	
155.430 R		412.8875	
155.025	XJF 905	155.580	
155.895	XJF 906/8	155.460	

FIRE

Toronto City

414.7625*R	Dispatch 1	411.7875*R	Tac 2
415.3125*R	Dispatch 2	411.8625*R	Tac 4
411.9875*R	Operations	412.3125 S	Supervisors
412.8125*R	Repeats FMO - 154.070		

154.070*	Ontario Fire Marshal Ch 1 - Provincial Common
154.190*	Ontario Fire Marshal Ch 2

Toronto Burroughs

154.400*	East York	154.430*	Scarborough - XJG 87
153.830*	North York - XJI 78	154.265	Scarborough Ch 2
153.395*	North York Ch 2	153.950	Scarborough Ch 3
154.325*	Etobicoke - XJJ 55	154.890*	York - XJF 89

Toronto Area Fire Departments

153.770*	York Region	154.950*	Mississauga - XJK 27
153.860*	Durham Region	154.235*	Mississauga Ch 2
154.800	Peel Region	154.160*	Halton Region

Toronto Ambulance

152.375* R	Metro Ch 1 - N/W Disp.	151.820* R	Metro Ch 2 - N/E Disp.
150.530* R	Metro Ch 3 - S/W Disp.	148.165* R	Metro Ch 3 - S/E Disp.
149.410* R	Metro Ch 5 - Tactical	150.100*	Metro Ch 6 - O.H.A.S.
148.360	Metro Ch 7 - Admin.	156.195	Metro Ch 8 - Tac
418.6875*	Helicopter Ambulance - Air to Ground		
413.6875	" " - Ground to Air		
129.275*	Air Ambulance Services Emergency Channel		
155.190* R	York/Oshawa - 149.470 Input		
154.540* R	Georgian Dispatch (Barrie)		

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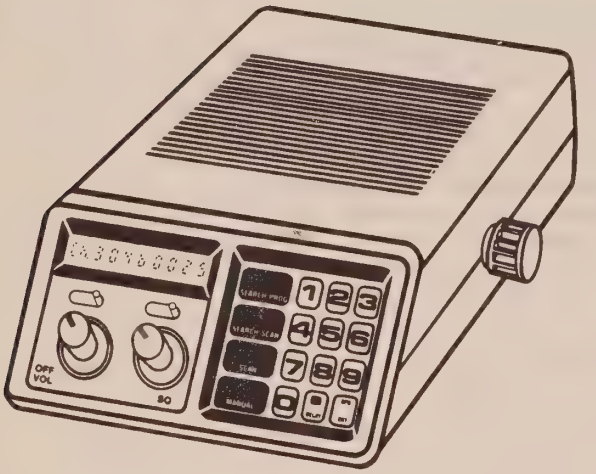

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COMMUNICATIONS PROFILE

Cliff Polkinghorn, 14310 Acacia St., San Leandro, CA 94579

This column is for special projects that explain various radio systems in detail. Frequencies and radio codes of not only municipal agencies and certain federal government agencies may be listed, but also large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible. If you are inclined to submit a report as the one below appears, please follow No. 8 in the inside front cover of the Newsletter.

WELCOME TO YOUR FEBRUARY ISSUE OF "COMMUNICATIONS PROFILE."

This month we have a rather OUTSTANDING article on the "COLUMBUS, OHIO, FIRE DISTRICT" and "HOSPITAL EMERGENCY RADIO COMMUNICATIONS SYSTEM."

We thank DAVID R. VAUGHN, OH-127, for this very nicely written article. Unfortunately, due to some communications difficulties within RCMA, this article is coming to the members a bit late. FOR THAT----I APOLOGIZE TO DAVID, and the MEMBERSHIP in general.

WELL ----- ON TO "COLUMNUS" ----- shall we?

This presentation will deal primarily with the City of Columbus,Ohio Fire Division. Included also will be a section on the Hospital Emergency Radio Communications System (HERCS) developed by the hospitals in Franklin County.

Fire suppression, rescue, and emergency medical services(EMS) for the City of Columbus are provided by equiptment and personnel located at 27 stations within the city. It should be noted that the City of Bexley,Ohio contracts these services from the Columbus Fire Division. Fire Stations 2 & 3 are co-located and thus result in two(2) stations being located in the same building.

The Columbus Alarm Office, located on the 4th Floor of City Hall, dispatches all equiptment via an address look-up file based on intersections from which assignment-card numbers (run card) are obtained. At the present time, all dispatch directions are given to responding units by voice: over local or extended public address systems, or over radio.

Fixed-Base Equiptment

Fixed-base transmitting/receiving equiptment is located at twenty-five(25) of the Columbus fire stations. These stations have an output power of 20-25 watts and transmit on 153.770 Mhz. The Alarm Office transmits with a power of 250 watts on 154.310 Mhz.

Response Levels

Response levels differ between day and night with a larger minimum of personnel assigned to night responses. 2 engines, 1 ladder, 1 rescue unit and a battalion chief respond to a residence or small commercial building alarm. This type of response is known as an "A" assignment with between 12 - 18 personnel responding. For a high-rise apartment alarm, high value or large fire risk, Columbus will initially dispatch 3 engines, 2 ladders, 1 rescue unit and 2 battalion chiefs. This type of response is known as a "B" assignment with between 18 - 28 personnel responding. A small proportion of EMS runs are in support of fire incidents.

Major Unit Types

The totals of major unit type for Columbus are as follows:

Engine Companies = 28
Ladder Companies = 10
Hose Companies = 10

Communications Profile continued

Tanker Units	= 4
EMS Squads	= 8
Medic Units	= 4
Rescue Units	= 4
Heavy Rescue Units	= 1

Apparatus Manning/Squad-Medic Definition

Minimum requirements for the operation of ladder and pumper companies within the Division is four(4) men per unit. Of those four(4), one(1) of the individuals is usually a Captain or Lieutenant.

A Squad consists of two(2) EMT's and responds to emergency situations which are usually not life threatning.

A Medic unit carries three(3) paramedics and responds to life threatning incidents such as heart attacks and high trauma.

A Rescue unit consists of three(3) EMT's and responds to fires, traffic accidents, and HAZMATS(industrial/hazardous material incidents).

In May of this year, the Division implimented a five(5) man Heavy Rescue unit. Valued at more than $50,000, the vehicle is more than twice the size of similiar trucks now in service. This new unit will resportedly replace, on some runs, the second pumper.

The Squad and Medic units do not use radio telemetry of vital signs either at the scene or en route to hospital emergency rooms. These units, however, have been monitored notifying the ER's of the transporting of a patient(s),their conditions(vital) and estimated time of arrival at the particular emergency room facility. All hospitals in the Columbus area are equipted with base station radios to monitor the calls via a tone encoder on 155.340 Mhz.

Equiptment Designation By Community

A unit designation was devised by the Central Ohio Regional Emergency Services(CORES) to alleviate confusion with multiple units responding to an incident. This numbering system was brought about by expansion in outlying areas which used mutual aid/ automatic response procedures. Many communities had the same unit number for a particular piece of gear as another. The Columbus Division uses 1 - 49 for that unit designation. A complete rundown of the numbering system will be presented in a later presentation which will include other communities within the bounds of Columbus,Ohio.

Run Activity By Station

The most active Columbus facility in terms of total runs is Station #2(East Fulton Street). The next most active stations are Station #1(North Fourth Street) and Station #17(West Broad Street). The lowest activity level is recorded by Station #25 (Terminal Drive/Port Columbus Airport). The next least active are Station #5(McNaughten Road), Station #27(Smokey Row) and Station #26(Fisher Road)

Mutual-Aid/Automatic Response Agreements

All departments within Franklin County have one(1) or more mutual-aid agreements with surrounding departments. Under mutual-aid, firefighters would only be called after initial crews had determined they needed more help.

Columbus has automatic response agreements with six(6) departments. Under an automatic-response agreement, Columbus will provide additional units, per assignment card, to the department initiating the alarm.

Frequency Usage

Franklin County's twenty(20) fire departments operate eighteen(18) dispatching centers using fourteen(14) different frequencies. The principal interdepartmental frequencies are 33.860 Mhz. and 153.770/154.310(m/rptr out). 33.860 Mhz is the primary mutual-aid frequency in Franklin County while 153.770/154.310 is the primary automatic-response frequency.

Hospital Emergency Radio Communication System

The Hospital Radio Communications System (HERCS) was developed in 1977 by hospitals in Franklin County, together with the Columbus and Franklin County Disaster Services Agency and the Mid-Ohio Health Planning Federation. HERCS was organized to augment daily emergency communications between the hospital emergency rooms and pre-hospital providers and to coordinate communications in disaster situations.

Present communications channel assignments in HERCS are based on the Special Emergency Frequencies assigned for the Disaster Services Agency of Franklin County. The system consists of the following:

Frequencies	Channel #	Designation	Linkage
155.340	1	Primary Emergency	EMS to Hospital
155.220	2	Primary Disaster	Hospital/Hospital
155.280	3	Secondary Emergency	County-Wide Disaster
155.400	4	Secondary Disaster	Unassigned at Present

Code Definitions - Daily Use

Signal "F" - Fire

Signal "L" - Location

Signal "T" - Time

Signal "O" - Indicates the last Division unit is leaving the scene. (Last engine,chief, etc. transmits when leaving fire or emergency scene).

Situation Contained - (Progress report) Indicates the fire or emergency is conatined or stabilized. Companies involved will be "tied-up" unless designated as being "in-service".

Working Fire - Indicates that fire situation is of such seriousness that companies or units other than those initially arriving may be needed, and that those companies enroute should be prepared to go to work. Squad or Medic will be dispatched; Police unit(s) will be dispatched for traffic conditions when needed.

Terminology such as "Fully involved" or "Coming through the roof", while descriptive, does not automatically indicate a "working fire".

In-Service - Indicates that specified company or unit is available for assignment.

Tied-Up - Indicates that company or unit is temporarily out of service due to assignment.

Out of Service - Indicates that company or unit will not be available for an extended or indefinite period of time(Due to breakdown, manpower shortage, etc).

Service Run - Indicates a non-emergency assignment. Company or unit will be in service for emergency dispatching unless specifically marked "Tied-Up".

Station Equiptment Assignments*

Station #	Fire	EMS	Rescue	Battalion Chief
1	E-1;E-9 L-1	Sq-1		
2/3	E-2;E-3 L-2	M-2	R-2	1
4	E-4;T-4			
5	E-5			
6	E-6;H-6	Sq-6		2
7	E-7	Sq-7		3
8	E-8 L-8	Sq-8		
10	E-10;H-10 L-10			5
11	E-11			
12	E-12 L-12		HR-12	
13	E-13;H-13 L-13			
14	E-14	Sq-14		4
15	E-15;H-15 L-15	M-15	R-15	
16	E-16	M-16	R-16	
17	E-17	M-17	R-17	
18	E-18	Sq-18		
19	E-19			
20	E-20;H-20			
21	E-21	Sq-21		6

Communications Profile continued

Station Equiptment Assignments (Con't)

Station #	Fire	EMS	Rescue	Battalion Chief
22	E-22;H-22 L-22			
23	E-23;H-23 L-23			
24	E-24;H-24 L-24			
25	E-25;T-25			
26	E-26;H-26 T-26			
27	E-27;T-27			
28	E-28			

* Unit designations;

E = Engine Company

L = Ladder Company

H = Hose Company(Squirt)

T = Tanker

Sq = EMS Squad

M = Medic Unit

R = Rescue Unit (3 EMT's)

HR = Heavy Rescue Unit (5 EMT's)

contact/info wanted

This column has two purposes: to help members contact each other, and to help members obtain information directly from one another on various subjects related to 2-way communications monitoring. If you desire to converse, meet, or correspond with other members by telephone, letter, or cassette tape in a certain geographic area or with members who have similar listening interests, this is the perfect place for you to make known your interests. Remember – those who respond will do so directly, so be sure to provide your phone number, the best time to be called, or your address. Write to: Amy Polivka, 12906 Ohio Circle, Omaha, NE 68164

BORDER CONTACT WANTED: This member wants contact for Montreal Island and metropolitan area, also contact from members close to the USA and Canada border. Many frequencies to be checked. Cassette recorder available. (11-4-83)
GILLES THIBODEAU (CAN 101), 3653 Montcalm Lac-Megantic, Quebec G6B 2H8 (819) 583-1817 after 6 hrs. PM

ATTN. EASTERN MASS. MONITOR LISTENERS: THIS MEMBER NEEDS THE FOLLOWING INFORMATION DESPARATELY:
* UNIT NUMBERING INFO, SECTOR INFO, CODES, AND ANY OTHER AVAILABLE DATA ON THE FRAMINGHAM, MA. POLICE DEPT. (39.52 mhz);
* APPARATUS AND STATION LIST FOR THE FRAMINGHAM, MA. FIRE DEPT. (33.56 mhz);
* ALL AVAILABLE DATA ON (1) NEW CELLULAR 800 mhz ACTIVITY; (2) NEW REGIONAL C-MED CENTERS IN MASS. NEEDS LOCATIONS AND FREQUENCIES SUCH AS MERRIMAC VALLEY C-MED, ETC.) (3) FREQUENCIES FOR LIFEFLIGHT HELICOPTER; (4) ANY AND ALL UPDATES ON NEW ENGLAND SYSTEMS. (11-12-83)
HOWARD M. ROSENBERG (MA-059), 8 Eisenhower Ave., Beverly, MA 01915

TORONTO - ONTARIO MEMBERS: How can you stand to listen to Toronto City Police? Do you use a "smart" squelch or subaudible tone de-

Contact/Info Wanted continued
coder to eliminate that awful noise? Please let this member know how it's done. (11-15-83)
SPENCER BAHNER (WA-026), P.O. Box 1432, Olympia, WA 98507 U.S.A.
Or call collect (206) 866-1016 (after 6 pm Pacific Standard Time)

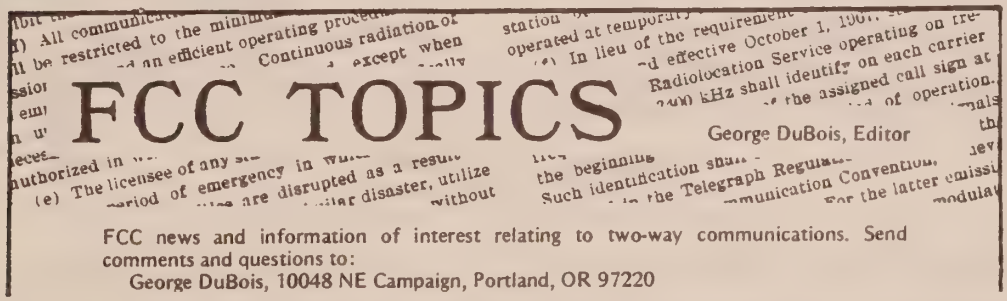
MEMBER CONTACT & INFO WANTED: This member would like to correspond with members living in Honolulu, Hawaii near HNL airport. Either by cassette tape or by letter. Also this member would like to hear from anybody in the LA area who can tell him the frequencies for the following:

The Westin Bonaventure Hotel
The Century Plaza Hotel
The University Hilton Hotel
The Hyatt Regency Downtown & Broadway Plaza
The Sheraton Grande Hotel
The AMFAC Hotel LAX/NOTE: Low Band antennas seen on airport pick-up vans.
Pinkerton's Security & Investigative Services
Also would very much appreciate any freqs for airport (LAX) related services, such as airlines, hotel pick-up vans, taxi companies, ramp and fuel services, baggage service and the like. This includes hotel security. (11-16-83)
DANNY O'BRIEN (CALA-540), 5437 W. Lemon Grove Ave., Los Angeles, CA 90038

ARMED FORCES MEMBERS: This member wishes to correspond with any member that might be a member of the Armed Forces (i.e., Army, Navy, Air Force, National Guard, Marines-active and reserves may write, too). (11-16-83)
DAVID FULLER (LA-031), Rt. 2, Box 156-A, Bogalusa, LA 70427
Phone after 4 p.m. 504-732-9943

WANTED: Frequencies for Med Air Helicopter based at Western Medical Center, Santa Ana, California, U.C.L.A. Med Center - Med Star Helicopter. (11-21-83)
JOHN DAVIES (CA-OR 235), 401 Piazza Lido, Newport Beach, CA 92663
(714) 673-6265

INFO WANTED: This member wants ten codes, signals, unit numbering plans and secondary frequencies for Northwest Suburban Chicago Police and Sheriff departments, particularly Schaumburg, Hanover Park, Streamwood, Roselle, Hoffman Estates and Bloomingdale (or communities bordering on these). (11-28-83)
KEVIN MCLINDEN (IL-149), 129 Andrew Lane, Schaumburg, IL 60193


FCC TOPICS
George DuBois, Editor
FCC news and information of interest relating to two-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

The FCC has finally issued new editions of all it's rules. Before, the Rules were issued in volumes, each containing a number of rule Parts. Parts 89, 90 and 94, for example, were contained in Volume V. They were sold by the Government Printing Office in subscription form. You received the original issue and update pages about once a year. These updates continued for an "indefinite period", until I guess they figure you got your money's worth or a major change, where the major part of a volume was amended.

Now the Rules will be issued once a year. There will be no more subscriptions. You have to spring for the whole thing every year if you want to keep current. They will be in either loose-leaf form, as they had been, or in the case of some Parts, pamphlet style. There

were a number of reasons for the change. One was the fact that the same information is contained in the Code of Federal Regulations. The CFR volumes contain all the public rules of every government agency. FCC Rules are in Title 47. One fourth of the CFR Titles are updated every three months. Title 47 is revised every October. The four books containing Title 47 are not actually printed and released until early spring, though. Now, using new "magnetic media", the GPO can print the soft cover CFR edition and the 8½ by 11 loose-leaf format without the same information being type-set twice. The information in both is the same.

Also, a number of rule Parts were rearranged in different volumes or were made into pamphlet form. This rearrangement was supposedly to group like services together, or make certain Parts available separately, a service to us, the buying public.

The new volumes, the rules parts contained therein, the GPO stock number and the prices are as follows:

Volume I	004-000-00409-4	$5.50
Part 0 - Commission Organization		
Part 1 - Practice and Procedure		
Part 19 - Employee responsibility		
Volume II	004-000-00410-8	$5.50
Part 2 - Freq. allocations,general rules		
Part 5 - Experimental Radio Services		
Part 15 - Radio Frequency devices		
Part 18 - Industrial, scientific and medical equipment		
Volume III	004-000-00411-6	$6.50
Part 73 - Radio broadcast services		
Part 74 - Auxiliary, special bdcst.services		
Volume IV	004-000-00408-6	$6.00
Part 81 - land Maritime services		
Part 83 - shipboard Maritime services		
Part 87 - Aviation services		
Volume V	004-000-00412-4	$5.50
Part 90 - Private Land Mobile Radio Services		
Part 94 - Private operational-fixed microwave serv.		
Volume VII	004-000-00401-9	$7.50
Part 21 - Domestic Public fixed services		
Part 22 - Public mobile radio services		
Part 23 - Intl. fixed public services		
Part 25 - Satellite communications		

(Four other volumes contain Parts governing telephone and common carrier tariffs and other procedures. I haven't listed them.)

The Rules now available in pamphlet form are:

Part 13 - Commercial operators	004-000-00415-9	$2.25
Part 17 - Antenna structures	004-000-00416-7	$2.75
Part 76 - Cable TV Service Part 78 - Cable TV Relay Service	004-000-00421-1	$3.75
Part 97 - Amateur Radio Service	004-000-00424-8	$3.75
Part 99 - Disaster Communications	004-000-00422-1	$2.25
Part 100 - Direct Bdcst.Satellite	004-000-00423-0	$2.00
Part 95,Sub.C - Radio Control Rad.Serv.	004-000-00426-4	$2.25
Part 95,Sub.E - Technical Regs.	004-000-00414-1	$2.00

(I have no information on the other subparts in Part 95 yet, Citizens Radio Service, GMRS.)

It appears that these pamphlets will be revised yearly too. Parts 95, 97 and 99 have been in pamphlet form for years but were only revised when there was a substantial change. Otherwise, you got a sheet or two of changes with the original and were never sure when to order to get a new edition.

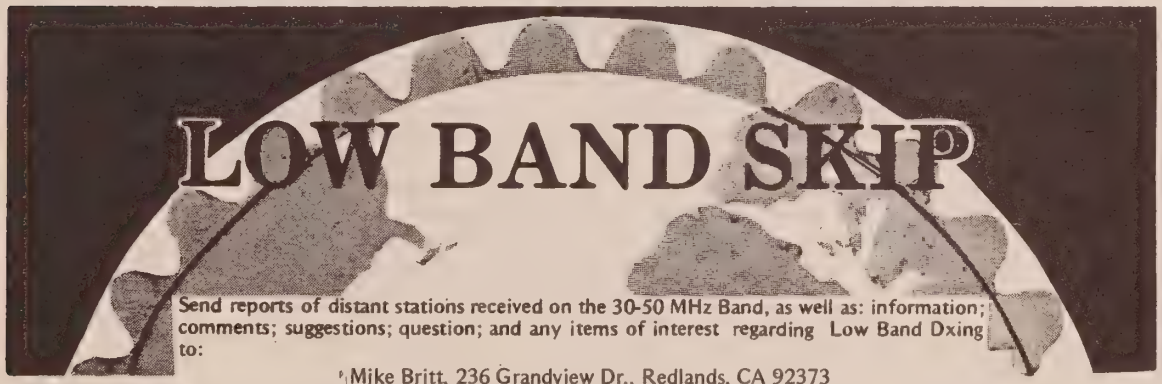
A couple of these you might want to pass up. Volume VII contains Part 22, Public mobile services (mobile telephone and paging). Part 22

FCC Topics continued

is in the process of being updated and rewritten, so it'd be a waste to buy it now. Also, there will be changes to Part 5 in volume II, but that's no big deal. The important thing about all this is that all these Rules were made up from the data used in the October 1982 CFR edition. That means it's about a year and a half out of date already. They are considering printing a new set again in early 1984, depending upon " the success of further refinements to the automated process". I think we can assume this would be the same as the October 1983 CFR edition - a little more current.

It's handy to have your own set of FCC rules, Part 90 in particular. Even if you don't understand half the stuff in it, it still lists all the frequencies available in each service, who is eligible in each service, etc. My suggestion is to file away the information in this column and save your money for a couple months. Buying the CFR edition makes a lot more sense, unless you have an extra binder you want to use or some other particular reason why you have to have the loose-leaf format. The Oct. 83 CFR edition will be out very shortly and I'll notify you of that fact in this column, just like I've been doing for years. If you want to order the Oct.,82 CFR volumes, see the prices in the July, 83 column. For $9.00 you get Parts 81 through 99. Add up the prices above to see which is a better deal. The '83 edition will probably be 50¢ or a dollar more. Plus, the CFR is available in microfiche, for $2.25 a book. This is a lot cheaper, especially if you want to order all the IRS regulations or something. The Government Printing Office's address is Washington, D.C. 20402.

An updated edition of the Communications Act of 1934 is now available. If you've always wanted your own copy of the FCC's "constitution", this is your chance. This new edition includes the revisions made by Congress in 1982. (See March, 83 column.) For a mere six dollars you get the Communications Act, the Administrative Procedure Act, the Communications Satellite Act of 1962, the Freedom of information Act, the Privacy Act and relevant exerpts of the Copyright law and the Internal Revenue Code. The publication has 300 pages, in loose-leaf form. Its stock number is 004-000-00404-3. Order from the Government Printing Office, Wash., D.C. 20402


LOW BAND SKIP
Send reports of distant stations received on the 30-50 MHz Band, as well as: information; comments; suggestions; question; and any items of interest regarding Low Band Dxing to:
Mike Britt, 236 Grandview Dr., Redlands, CA 92373

Greetings!

I extend my apologies for being absent from the newsletter last month, but I simply didn't make my deadline as I was in the midst of midterms at that time (first days of November).

If you are reading this in January, then I will still be in Mexico. Additionally, if you have written me anytime between late December and early February, I will not get around to answering you until after I have returned to the U.S. in February. I hope this does not inconvience anyone.(This column, and the next few, were prepared prior to my leaving for Mexico).

WHISTLER RADIO-TELEPHONES ARE FROM WEST INDIES!

In the December newsletter, I stated I beleived the 'whistler' radio-telephones heard by Chuck(IL-141) were probably fom Mexico.

Low Band Skip continued

Well, I was wrong again. After listening to additional recordings of these radio-telephone links, it became apparent that they were most likely coming from areas where telephone land lines are either impractical or impossible to use. This is usually the case in areas in Central and South America which are isolated due to thick jungles, very high mountains, or water.

As it turns out, it was the last case - water - which was the reason the telephone conversations were being sent via radio.

The discovery that the channels were from the West Indies came as the result of information gained by listening to several ENGLISH language coversations. In fact, the solid evidence came from a series of phone calls made by a southern California businessman who was calling from St. George, Antigua, to the United States.
It is also apparent that this 'network' of radio-telephone link frequencies serves a number of the small islands in that region of the West Indies - including Puerto Rico. In fact, I had suspected Puerto Rico earlier, based on the content of some of the Spanish conversations, but had not been able to prove that theory. A primary clue was the fact that one Spanish speaker called a bank (island to island?) and the conversation was in refrence to 'dolares' which of course could only be U.S. currency. This makes sense (cents -ha,ha) because U.S. currency is legal tender in Puerto Rico.
The channels seem to have a spacing of 15 KHz.

CANADA LOW BAND FREQUENCY INFORMATION - PART 2

In the Dec., 1983 Low Band Skip column, a compiled list of known Canadain frequencies between 30 and 40 MHz was presented. This month, frequncies between 40 and 50 MHz are listed.

```
40.06      VCT666 R.C. Pruefer Co.,Essex, Ontario
40.10           * CANADIAN INTERNATIONAL PAPER CO., QUEBEC PROVINCE (FR)
40.12           * CANADIAN INTERNATIONAL PAPER CO., QUEBEC PROVINCE (FR)
40.16           * Donohue St. Felicien Inc., Quebec Province (French)
40.18           * CANADIAN INTERNATIONAL PAPER CO., QUEBEC PROVINCE (FR)
40.36             ?    (Delivery Co.)    , Montreal, Quebec (French)
40.44           * CANADIAN INTERNATIONAL PAPER CO., QUEBEC PROVINCE (FR)
40.48           * Donohue St. Felicien Inc., Quebec Province (French)
41.96             Papeterie Reed, Ltee: Prov. du Quebec (French)
     (B)        * ONTARIO PROVENCIAL POLICE, ONTARIO PROVINCE +
42.02 (M)       * ONTARIO PROVENCIAL POLICE, ONTARIO PROVINCE +
                  (mobiles to 41.96 B)
42.06 (B)       * ONTARIO PROVENCIAL POLICE, ONTARIO PROVINCE +
42.16 (R) - input is 43.16
           CHD545 Campagne General Electrique Du Canada, Montreal,
                  Quebec (French)
           CJB631 (unknown)              , Sherbrook, Quebec (Fr)
           CJH504 Gravibex, Ltee, Longvedi, Quebec (Fr)
           XNI605 Carriere Benier Ltd, St. Jean, Quebec (Fr)
           XOT881 Excavation M. Toulsuse, Inc., Sherbrook, Qu. (Fr)
42.22 (M)       * ONTARIO PROVENCIAL POLICE, ONTARIO PROVINCE +
                  (mobiles to 42.06 B)
42.54      VCW491 Twinbee Construction, Brucefield, Ontario
           XNB788 William B. Rathwell, Milton, Ontario
46.06      XNE758 P. Ballargeon, Ltee, Iberville, Quebec (Fr)
46.12      VXZ32  E.B. Eddy Forest Products, Hull Quebec
           XLN463 Quebec Ministere De Lenergie and Des Resources
                  Beauport, Quebec, (French)
           XNB529 Canadian Shade Tree Service, Lachine, Quebec (Fr)
           XOT544 Bernard Proulex, Inc., Nicolet, Quebec (Fr)
```

* - indicates multiple transmitter bases are assigned to this operation throughout the province.

+ The OPP has now switched to high band, but in years past, the low band OPP channels were extremely active when heard via skip.

* * * * * *

VHF-HI Band Es skip reported by Hugh (CA-LA-472) in the Dec., 1983 Low Band Skip Column.

Low Band Skip continued

CORRECTIONS AND CONFIRMATIONS - BAJA CALIFORNIA

148.225 (R) SPANISH - This is the Baja California Public Works.
148.300 (B) SPANISH - Ensenada P.D. (Confirmed)
151.400 SPANISH - Hugh listed as Tijuana P.D., however, this is actually Tijuana Fire Department, the PD went to 166 MHz repeaters quite some time ago.
151.460 (R) SPANISH - This is no longer used by Tijuana as Hugh listed. He probably heard Ensenada Public Works which operates on this frequency.

(For additional information and frequencies for Baja California, see RCMA newsletters of Dec. 82 and Jan. 83: International Column - the Dec 82 International Column lists Tijuana frequencies, including the current 166 MHz PD channels. - ED)

FEDERAL GOV'T and ★ MILITARY ★

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:
Dennis Biagioli, 607 W. Pleasant Ave., Villa Park, IL 60181

Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

Hi! Here we are for another month of cold weather and hot radio monitoring. February isn't usually the best listening time around the Chicago area. Hope things in your area are listenable. Let's get going with this month's mail.

An Illinois member who wishes to remain anonymous sent this:

> A few months ago I was able to monitor some very interesting "skip" receptions. Almost all day on July 29th I heard the U.S. Army Corps of Engineers (Lower Mississippi Valley Division) at Vicksburg, Mississippi, using a frequency of 38.890 mHz. I wrote to Major General William E. Read and advised him of some of the river stages and dredging operations that I had heard over my scanner. I asked if he would send me as much information as possible about the radio system of the Lower Mississippi Valley Division (locations, frequencies, call signs, radio channel names, maps, codes, unit numbering systems, etc.). I did not receive a positive response to any of my questions.

DEPARTMENT OF THE ARMY
LOWER MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P. O. BOX 80
VICKSBURG, MISSISSIPPI 39180

REPLY TO ATTENTION OF:

August 31, 1983

Plant Branch

Dear Mr. [redacted]:

In a recent letter to Major General Read, you requested information about the Corps of Engineers radio communications networks and described your hobby of monitoring radio transmissions.

Federal Government/Military continued

Your interest in radio is one shared by many these days and well that is the case. Your request has been reviewed by the proper people both here and in Washington with the decision being that the information requested cannot be publicly disseminated.

We trust that your hobby will continue and without effect due to this decision.

Sincerely,

W. Jack Hill, Jr.
Chief, Construction-Operations Division

JEFF SHINN (ID-010) sends the following being used by National and Air Guard at Gowan Field, Boise Municipal Airport, Idaho:

41.50	Helicopters to Tower
163.5625	Unknown usage
164.5000	Security Police
164.9875	Air Guard
165.1375	Aircraft Maintenance

JOE M. LEWIS (MO-015) is currently residing in Florida and sent the following:

162.2250	Tampa Post Office
163.3750	Bay Pines V.A. Hospital Security (St. Petersburg)
163.4875	MacDill Air Froce Base Security
164.1750	Bay Pines V.A. Hosp., undetermined usage
164.2250	Dept. of Energy, St. Petersburg
171.9500	Ditto
410.2200	Tampa Post Office Security
419.1750	G.S.A., Tampa

ROBERT SHAY (AL-???) sent this material from the Army's Ft. Rucker, Alabama:

142.4000	Carolina Security Post
142.9750	Army MP & Fire Net
143.1250	Army MP's, MPI and CID
143.2250	Army MP's

REED DARSEY (AL-022) sent me this clipping from the Mobile, Alabama, PRESS REGISTER of October 22, '83, describing a radio equipment seizure. Apparently, transceivers that are programmable from 155.000 to 163.200 mHz are being sold, and being programmed to transmit on frequencies not available (legally) to the owner. If you hear unusual transmissions that are definitely not images, this might be what is happening in your area.

Used by ship radio stations

Radio transmitters seized

U.S. marshals from the Mobile office and engineers from the Atlanta district office of the Federal Communications Commission earlier this week seized approximately 53 radio transmitters which allegedly were being used illegally by ship radio stations.

The Wednesday seizure was conducted at S.E.E. Inc. of Bayou La Batre, which is a marine sales and service company. In addition, an allegedly illegal radio transmitter was seized at a nearby residence which officials said was being used as an unauthorized land

radio station.

A spokesman for the FCC said the effort is part of a crackdown on illegal ship radio usage in the coastal areas of the Gulf of Mexico, including Alabama, Florida, Mississippi, Louisiana and Texas.

The unlawful activity consists, in part, of operation of radio transmitters on frequencies which are not authorized for marine use, but were authorized for use by taxicabs, local telephone, police and fire department and other radio services essential to the protection of life and property.

Numerous complaints have been made by police departments and other authorized users, who asked for assistance in removing the unauthorized stations because of the danger of interference with emergency communications.

The search warrants were issued by U.S. Magistrate David Bagwell based on evidence developed by the FCC's Atlanta office and presented to Assistant U.S. Attorney Ruddy Favre.

The value of the seized property is estimated at $39,000. No arrests were made at the time of the raids.

JOHN (IL-010) PROVIDES THIS INFORMATION FROM THE 1982 ANNUAL REPORT OF THE NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION.

On December 30, 1982, NTIA reported to Congress the significant events within NTIA during calendar year 1982. (No mention was made of the Reagan administration's policy change in denying requests for federal frequency information!) Some other key points WERE covered, which may be of interest to federal government monitorists:

1) An Emergency Communications Working Group was established. The ECWG is "responsible for developing the Administration's policies and action plans with respect to emergency mobilization preparedness". Seven surveys of federal agencies and 20 seminars were conducted for approximately 700 Federal employees on telecommunications and information vulnerability.

2) Approximately 116,000 Federal radio frequency assignment "actions" were taken in 1982 through IRAC (Interdepartment Radio Advisory Committee), which is chaired by NTIA. (An "action" is like those done by the FCC for non-federal frequencies; it usually involves updating, correcting, adding, or deleting the IRAC computer per new information submitted from the various agencies. Only a small part of the 116,000 "actions" were "new" assignments.)

3) NTIA, the FCC and the State Department began work on an international training initiative called the U.S. Telecommunications Training Institute. The private sector will train about 300 people from developing nations on systems, telegraphy, and satellite, broadcasting, and spectrum management.

4) Statistics on the contents of the federal NTIA/IRAC master file (as of June, 1982) were listed as follows: The number of "assignments" for each federal agency were given, but no further detailed breakdown was given. The agency abbreviation codes used are the same ones used by IRAC in past microfiche editions sold to the public, and were used by Bob Grove in his FEDERAL FREQUENCY DIRECTORY (1980) (Grove Enterprises, Inc., Route 1, Box 156, Brasstown, NC 28902).

A	10062	FCC	770	ICA	979	OA	1
AF	25317	FEMA	613	ICC	1	OPM	-
AOTC	3	FHBB	1	J	13993	OTA	1
AR	20995	FMCS	8	L	87	S	131
AUSC	5	FRS	94	LC	5	SC	2
C	4232	GAO	1	N	28099	SEC	1
CFTC	8	GPO	3	NASA	1252	SEN	2
CG	9142	GSA	507	NG	7004	SI	104
CIA	185	HHS	1456	NGAL	13	T	5244
CPSC	1	HR	5	NRC	256	TRAN	539
DOE	5752	HUD	6	NS	141	TVA	1334
EPA	213	I	12330	NSF	213	USCP	12
FAA	25047	IBWC	77	NTSB	-	USPS	1077
						VA	1483

The above list totals about 179,000 assignments; assignments might be for throughout the United States, or just at one specific location, so the above statistics are relatively meaningless unless compared to either Bob Grove's book or an issue of the IRAC microfiche.

Federal Government/Military continued

A complete copy of the 1982 Annual Report can be obtained from Bernard J. Wunder, Jr., United States Department of Commerce, NTIA, Washington, DC, 20230. Other than the above statistics the report contains little value to the typical federal monitoring enthusiast.

That's about it for another cold month. Keep the frost off your pen, typewriter or computer by sending something along for this column.

73's
Denny

Marketplace

Gary M. Darcy, Editor

Members may advertise, free of charge, items wanted, items for sale, and items for trade that are associated with the hobby of monitor/utility radio listening. No dealer ads will be accepted for this column. RCMA assumes no responsibility for the outcome of any transactions between members resulting from ads printed in this column. Send to:
RCMA MARKETPLACE, c/o Gary M. Darcy, P.O. Box 1329, Palmdale, CA 93550.
Please be sure to include your membership number.

All Marketplace ads will be accepted ONLY on special forms available from this column's editor. Send a self-addressed STAMPED envelope (business size) to the address above to receive a supply of forms. Foreign members do not need to include postage on envelopes they send.

FOR SALE: Bearcat IV. Includes crystals for: 39.58; 39.70; 162.155; 44.82; 37.90; 44.94 & 44.98. Unit as good as new. Make offer + shipping. Contact: RICK GREGORY (KS-032), 525 E. 7th, Concordia, KS 66901 or phone 913-243-2667.

FOR SALE: Regency M-400. $175.00/paid UPS delivery. Contact: ALBERT E. NICHOLS (RI-007), P.O. Box 8292-Garden City Stn., Cranston, RI 02920 or phone 401-397-7458.

FOR SALE: Antenna Specialists ASP-810 VHF Log Periodic Array (148-174 Mhz)(8.1 DB gain). $75.00/local delivery only. Contact: ALBERT E. NICHOLS (RI-007), P.O. Box 8292-Garden City Stn., Cranston, RI 02920 or phone 401-397-7458.

FOR SALE: Bearcat 220. $175.00/paid UPS delivery. Contact: ALBERT E. NICHOLS (RI-007), P.O. Box 8292-Garden City Stn., Cranston, RI 02920 or phone 401-397-7458.

FOR SALE: Used Bearcat type crystals (10.8 IF) for 162-174 Mhz and 406-420 Mhz. Guaranteed good or your money back. Send SASE for current list. $2.50 each (5 or more, $2.00 each). Contact: JOHN M. COKER (IL-010), 133 Vonachen Ct., E. Peoria, IL 61611.

FOR SALE: Crystals. 9/16 spacing between pins. These crystals are mainly for frequencies under 30 Mhz. Will also trade for Realistic VHF crystals. $2.00 each. Contact: DELBERT SMITH (CAN-083), Box 2164, Melfort, Sask., Canada S0E 1A0 or phone 306-752-5087.

FOR TRADE: Realistic 16 channel scanner/PRO-16A. This unit is brand new; has never been used yet. Will trade for any programmable scanner or sell for $200.00. Contact: DELBERT SMITH (CAN-083), Box 2164, Melfort, Sask., Canada S0E 1A0 or phone 306-752-5087.

WANTED: Realistic crystals. Send list of Realistic crytals; I will pay for postage. Contact: DELBERT SMITH (CAN-083), Box 2164, Melfort, Sask., Canada S0E 1A0 or phone 306-752-5087.

FOR SALE: Fox Programmable Scanner Model 10/60. 10 channel unit; AC/DC; H-L-U; 60 pre-programmed frequencies, 10 you can program. $180.00. Contact: JERRY CALLAM (OH-015), 10 Avalon Rd., Mt. Vernon, OH 43050.

FOR SALE: Bearcat BC-100. With accessories and box. Excellent condition. $265.00. Contact: WILLIAM M. MULLOWNEY (MA-029), 62 Woodlawn St., Everett, MA 02149.

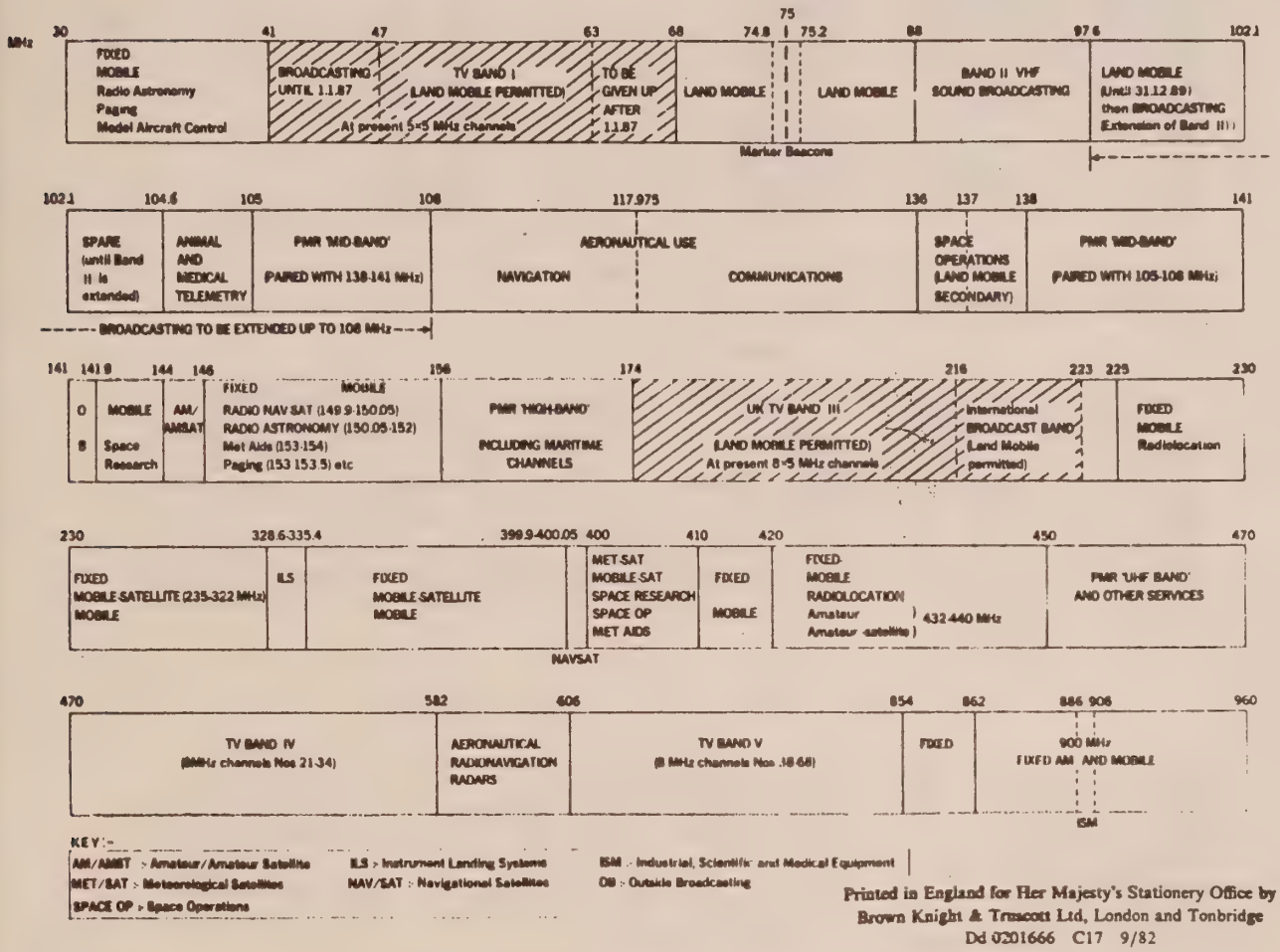
FOR SALE: Two Bearcat BC-300 scanners. Both units in excellent working order; look good; with boxes & accessories. $275.00 each or both for $500.00. Contact: CPL DAVID N. SILVA (MA-008), H & HS Crash Rescue, MCAS-H New River, Jacksonville, NC 28540 or phone 919-347-7106.

International

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to: Rickey Stein, 456 Barrymore Place, North Brunswick, NJ 08902.

We have some more U.K. material this month. The Simplified Spectrum Diagram (fig.1) is from a source similar to the last spectrum diagram of a couple of months ago. Again, there are very broad and generalized headings with no real indications such as police or fire. It is again important to look at what is not mentioned or indicated in order to determine where the most interesting communications might turn up.

SIMPLIFIED DIAGRAM OF SPECTRUM OCCUPANCY 30-960 MHz



Printed in England for Her Majesty's Stationery Office by Brown Knight & Truscott Ltd, London and Tonbridge
Dd 0201666 C17 9/82

To show you what can be done when you visit a foreign region, even without specific prior knowledge of frequency allocation, read on. I recently received a tape from John Breen (PA-066) and a letter that in part reads:

'I had to be in London recently to teach a seminar, so at the last second I threw my BC-100 into the suitcase and took it with me. Actually I used the "Stein method". I put the BC-100 and a set of mono earphones in a plastic bag (sans antenna) so that it looked like a "walkman". So luck would have it, my luggage was never examined.

As it turns out, London is a hotbed of scanner activity. I only had a few hours to listen to the scanner, but nearly every frequency range I tried was very active! (except VHF-Low which was silent). I arrived in London on a Sunday morning and found the scanner was not too active.

It picked up later in the day and really took off on Monday morning when I arose at 6 a.m. Actually, I heard everything from mobile phones to river boat traffic on the Thames.'

The tape which runs for two hours, is an interesting survey of the radio activity in London. It shows what can be heard even without having the European Land Mobile Band (66-88MHz) or the capability to receive AM. Here's a list of some of the recorded (active) freqs. and what the activity appears to be:

146.120 repeater	147.210 police	147.220
147.230 police	147.240 police	147.250 police
147.265 police	147.270 police	147.275 police
147.285 police	147.300 police	147.320 police
147.350 police	147.375 police	147.380
147.385 police	147.400 police	147.415 police
147.430 police	147.470 police	147.500
154.180 police	154.380 police	154.430 police
156.400 marine	159.150 mob phone	163.030 mob phone
163.060 mob phone	163.110 mob phone	163.900 mob phone
164.040 mob phone	164.350	164.800
165.120 ambulance	165.650	165.795
166.335	167.105	167.110
167.120	167.140 business	167.180
167.260 business	167.820 taxi	168.170 taxi
169.140	440.600 taxi	445.650 alarm co.
445.750 med. service	452.900 mob phone	454.700 - cw id
454.825 'pageboy'	462.200 del. serv.	462.220
463.575	467.400 med. service	478.600 TV audio

An excellent job by John. Thanx. Does anyone in London care to comment on the above freqs?

••••

I recently received the update for the Scanner Master-NY Metro edition. If you're not familiar with these publications, they are frequency books containing not only frequency and call info but in many instances, details about 10 calls, car numbers, beats, etc. The information is kept up to date by actual monitoring of the areas. Editions are now available for CT/RI, MA, NYC Metro and by the time you read this, Philadelphia and Washington DC. For further information, send an SASE to: SCANNER MASTER, Box 428, Newton Highlands, MA 02161.

••••

Jerry Callam of the All Ohio Scanner Club wrote me concerning a log tape written for the Timex Sinclair computer. The program will sort and store by six fields (and these can be changed as needed.) Tapes are also available for the TI99/A and the IBM PC and also could be modified for the VIC-20. At 64K, the log will hold 600 entries. Tapes are available from Kentronics, Inc., Box 586, Vernon, AL 35592. For more info send an SASE.

••••

From time to time, I receive a British radio magazine called Practical Wireless from David (001-NIRE) or Pete (002-NIRE). The Dec 83 issue has some very interesting information included, esp. the ad for the AR2001 receiver. This radio, which looks very similar to the "Regency" type receiver is pegged at £298 (abt$432)-a high price. Is anyone fimilar with the AOR company?

••••

RCMA

Radio Communications Monitoring Association

MARKETPLACE EDITOR / P.O. BOX 1329 / PALMDALE, CA 93550-1329 U.S.A.

MARKETPLACE AD REQUEST FORM (020182)

Circle One: FOR SALE FOR TRADE WANTED

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_____

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_____

Phone Number: (____) - _____

Mailing Address (if different from residence address): _____

_____

City/State/Province/Zip Code/Postal Code/Country: _____

_____

Which of the following do you want included in your ad? (Check all that are desired):

___Residence Address ___Mailing Address ___Phone Number

.....

Your Ad: Make/Manufacturer: _____

Model Number: _____ Asking Price: _____

Additional information to be included in ad: _____

_____

_____

I hereby agree to abide by the guidelines currently established for the MARKETPLACE column. Should I receive money from other members for goods and/or services that I am no longer able to provide, I will immediately return that money to that other member responding to my ad.

Date: _____ Signature: _____

FIRST NATIONAL AND INTERNATIONAL ORGANIZATION
OF MONITOR RADIO LISTENERS

a new receiver from **AOR**, the **AR2001**.

We are proud to introduce the VHF/UHF communications receiver we have all been waiting for. A glance at the brief specification will tell you why the new AR2001 receiver is going to take the listener by storm.

★ **Continuous** coverage 25 – 550 MHz (no gaps).
★ Receive modes of AM (for VHF/UHF airband), FM narrow (for amateur radio, CB, business radio) and FM wide (for broadcast and TV FM).
★ Digital display of frequency, mode and memory channel.
★ Memory channels which store frequency **and** mode.
★ Full range of scan facilities.

The performance of the AR2001 sets new standards. Gone are the complaints of "deaf" receivers. The AR2001 has typical sensitivity of 0.2 microvolts for 12dB SINAD on FM (N) **across the entire 25 – 550MHz range.**

Finally, the AR2001 is small, light weight, and powered from any 12V dc source, so it can be used at home, in the car, boat or aircraft, and whilst out portable.

SALUTE THE NEW LEADER!

PROVISIONAL PRICE £298 = U$ 432.00

receiver coverage continuous from 25 to 550 MHz.

If you've tried to read the message at the end of the December column, sorry about that. There are a couple of typos there. That's what happens when the column is late and the proof reading is too fast.

••••

That's all for this month. Til next time....שלום

photo department

Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to:

Hugh Stegman, 11622 Exposition Blvd., #2, Los Angeles, CA 90064

This month we will do something that hasn't been tried in a while, and have a roundup of RCMA members' own monitoring setups.

The first photo comes from Robert S. Mattson (NJ-137), who monitors local fire, business and public safety traffic. Equipment (starting top l.) is a BC 100, a Lafayette crystal receiver for the local fire channel, Regency D-100, Realistic Weatheradio, Bearcat III (a backup), three Bearcat scanners, a Lafayette tuneable, BC 200, and a Realistic DX-300 for HF. Mounted above the BC 200 are the Grove Scanner Filter and a remote gain control for a Winn-Tenna pre-amp. Four outdoor antennas are used.

Robert also sent along a shot of his form of "advertising" for RCMA via his '79 Dodge Magnum.

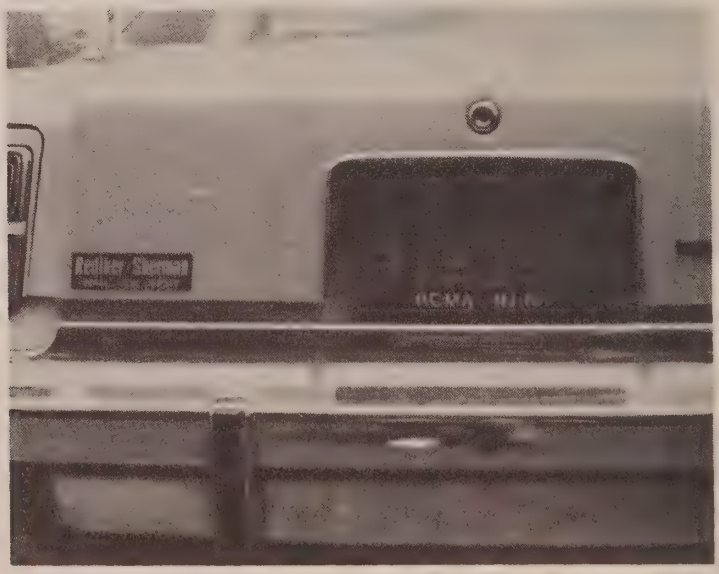
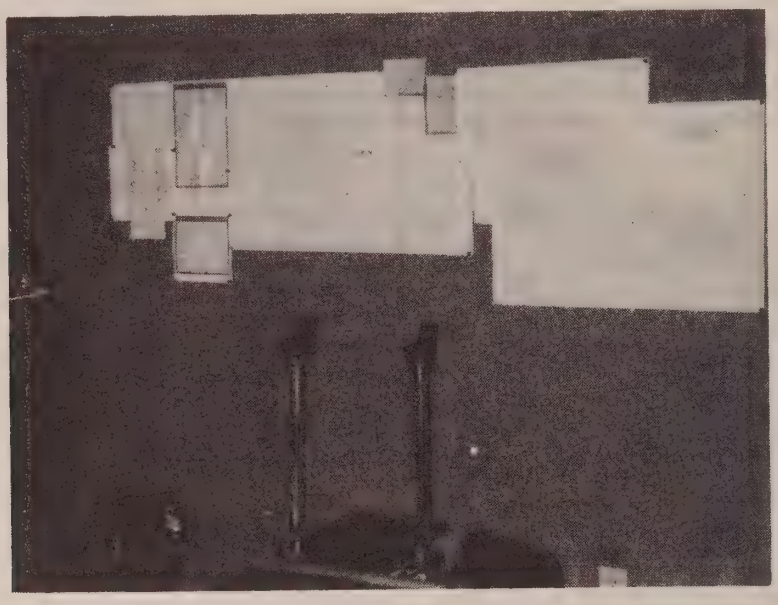


Photo Department continued

Next shot comes from Joe M. Lewis (MD-015). Joe is disaster co-ordinator for the Central Pinellas REACT in Clearwater, FL. Thus his equipment includes a Wilson UHF H-T (in charger, upper l.) and a Lafayette UHF base station (below). Scanners are two Realistic hand helds, a BC 220, Realistic 16 channel, and a Lafayette tuneable for low band. Radios have external speakers. Joe has collected 440 patches, a few of which are visible on the back wall.

The attractive, desktop setup belongs to Brent Alexander (TX-064). Equipment is (l. to r.), a cordless phone, tape machine, rotator control (for Grove Scanner Beam), Grove Power Ant (a preamp/indoor antenna combination), Realistic programmable, 3 extension speakers, small stereo, digital clock, Bearcat 4/6 hand held, Regency crystal scanner, Realistic Pro-2001 programmable. Brent states that the Power Ant desenses when used with his outdoor antennas, but it makes a good indoor antenna during thunderstorms. And speaking of

Photo Department continued
South Texas weather, note that the map in back is a hurricane tracking chart. Brent's other maps are mounted where he can also get some exercise for the day.



Next time we'll start getting into a huge batch of pics sent by regular contributor Ed Sirovy (IL-004). They include absolutely everything you ever wanted to know about fire dispatching in Chicago or any large city. We'll then do some pre-Olympic surprises. But this doesn't mean I'm not looking for material. If you've got any good shots, SEND 'EM IN. So long...

R.C.M.A. Member Publication

Daryll Simington, OH 149, has just released the 1983-84 edition of his SCANNER FREQUENCY DIRECTORY for Northwestern Ohio and Southeastern Michigan. This second edition covers 9 Ohio counties --Defiance, Erie, Fulton, Henry Lucas, Ottawa, Sandusky, Williams, Wood-- and 7 Michigan counties -- Hillsldale, Lenawee, Monroe, Washtenaw, Wayne, and up to 14 mile road of Macomb and Oakland. For this area the scanner frequency spectrum is covered with great detail.

The 84 page directory follows the same format as this newsletter. e.g. four pages to an 8.5x11 sheet saddle stiched. However Daryll took the time to obtain high quality camera copy before submitting it to the printers, and hence has every page very readable as sometimes the RCMA fails to do.

The directory appears to be very comprehensive. 5000 frequencies covering aircraft, business, public service, railroads, utilities, etc. While we can't confirm every listing, the few we did spot check with Police Call and Tom Kneitel's Confidential List were validated. (the etc above covers some frequencies we do not discuss here). This directory is just not a computerized list of some FCC microfiche. Daryll places an '*' by each listing that has been monitor checked, and has identified paging channels. In addition to listings by name, you have cross listings by frequencies and by call sign.

The format of the directory is one you can work with. Its size is perfect for stashing in glove compartment or coat pocket and taking hilltopping. While there is very little white space the format still says "Take Me and Write in Me." which makes it more valuable over the months. There is no advertizing in the directory, only a small plug for the "ALL OHIO SCANNER CLUB" which for this geographic area is probably a good deal.

The price is $5.95 but that also contains a $2.00 rebate on some supplementary material. Daryll did not send information on shipping costs, but if you would write Daryll Simington, President, Midwest Software Services, P.O. Box 399, Holland, Ohio 43528, I suspect he will tell you. I also suspect he would appreciate some reports on those few frequencies he has not tagged as monitor checked.

John Clark CAOR078

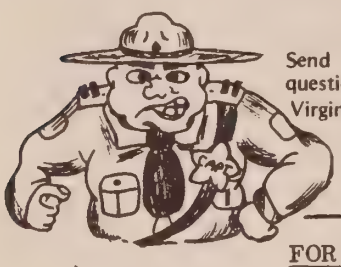
Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police; sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

STANDARD TEN SIGNALS

The RCMA recognizes that most Public Safety Departments use "ten signals" as a part of their standard communication procedure. Our editors will not print the more common signals, which are listed below, but will note additions and differences when listing a departments "ten signals". By not having to print the below listed signals repeatedly, we will save valuable space for additional data. Only differences and additions to this listing will be noted by editors. Please refer to this listing when monitoring. Any corrections or additions will be noted during coverage by the editor.

10-1	Receiving poorly	10-33	Emergency
10-2	Receiving well	10-36	Correct time
10-3	Stop transmitting	10-41	Beginning duty tour
10-4	Okay, acknowledgement	10-42	Ending duty tour
10-5	Relay	10-43	Information
10-6	Busy	10-50	Accident (F, PI, PD)
10-7	Out of service	10-51	Wrecker needed
10-8	In service	10-52	Ambulance needed
10-9	Repeat	10-55	Intoxicated driver
10-13	Weather / Road conditions	10-56	Intoxicated pedestrian
10-18	Quickly	10-57	Hit & run accident (F, PI, PD)
10-19	Return to ----------	10-70	Fire alarm
10-20	Location	10-71	Advise nature of fire
10-21	Call ------- by telephone	10-72	Report progress of fire
10-22	Disregard	10-73	Smoke report
10-23	Arrived at scene	10-74	Negative
10-24	Assignment completed	10-76	Enroute
10-25	Report in person to ---------	10-77	Estimated time of arrival
10-27	Drivers license information	10-82	Reserve lodging
10-28	Vehicle registration information	10-88	Telephone number of ------
10-29	Check for wanted	10-99	Wanted / Stolen is indicated
10-30	Unnecessary use of radio	10-0 / 10-100	Use caution



PUBLIC SAFETY — SOUTH EAST:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Florida, Georgia, N. Carolina, S. Carolina, W. Virginia, and Virginia:

William Mauldin, 2268 N.W. 30th Rd., Boca Raton, FL 33431

FOR TAMPA BAY/AREA LISTENERS & SUPERBOWL ATTENDEES!

Here are the frequencies to be used by CBS for Superbowl coverage:

153.290
161.640 These 3 freqs are IFB use, i.e., engineering/camera
450.800 cue freqs.

450.2125
450.3500 These 4 freqs are for 2-way communication.
450.4125
450.5125

The normal freqs for WTVT (TV Ch 13), local CBS affiliate, are:
152.87, 153.29, 450.15, 450.35, 455.35
947 - 952 MHz range for low-power microphones

Greetings and welcome to the Public Safety Southeast. I will have to say that the mail this month as been excellent, and I want to thank all of those who sent in their contribution. Remember, it is YOUR contribution that puts information in this column for other club members to read and enjoy. That is the purpose of the club, to join, be active and to contribute. My special thanks to Ignatius Kapalczynski of American Fire Services for his contribution. By the way, you may obtain the complete American Fire Services Directory for $32.50 from Ignatius at 39 Sherbrooke Avenue, Hartford CT 06106. The book is 600 pages and has 80 maps, complete with frequencies and statistics for fire departments.

My special thanks to Joe, MD-015; Mark, VA-051; Peter, VA-076 and several others that noted in their contribution that they did not want to be named.

MONITORING ROANOKE VIRGINIA

Roanoke Police Dispatch	F1 155.130 MHz	F2 155.490 MHz
Roanoke Fire Department	F1 154.310 MHz	EMS 155.820 MHz
Roanoke City Public Works:	Water Department	158.250 MHz
Public Works	F1 158.820 MHz	F2 155.025 MHz
Roanoke Valley Metro Transit	F1 453.675 MHz	
Roanoke City School Security	F1 453.575 MHz	

Roanoke County Sheriff	453.050 MHz	(Noted as city transmitter)
Roanoke County Sheriff	39.360 MHz	(VA Sheriff low band freq)
Roanoke County Sheriff	155.790 MHz	(Tactical frequency)
S.I.R.S. Frequency	39.540 MHz	
Roanoke County Fire/Rescue	46.480 MHz	(Rescue #1)
Roanoke County Fire Rescue	45.880 MHz	(Rescue #2)
Roanoke County Public Works	45.080 MHz	(County PW F1 Freq)
Roanoke County Public Works	45.060 MHz	(County PW F2 Freq)

Vinton VA Police	154.875 MHz	(Single Police Dispatch Freq)
Vinton VA Public Works	45.120 MHz	(City-wide dispatch for all PW)

Salem VA Police Dispatch	453.225 MHz	(F1)
Salem VA Fire / Rescue	453.475 MHz	(Dispatch for both)
Salem VA Public Works	453.425 MHz	(Dispatch for all city PW)

(Editors Note: I have listed the Public Works frequencies for these cities because in many cases police use PW frequencies after hours for surveillance.)

Salem Division VIRGINIA STATE POLICE:

SOUTH Dispatch:	158.985 MHz	Base Dispatcher
	154.905 MHz	Mobile units to base
NORTH Dispatch:	159.000 MHz	Base Dispatcher
	154.935 MHz	Mobile units to base
Tactical (car to car)	154.665 MHz	
Surveillance	154.695 MHz	
OTHER VSP Freqs...	159.135 MHz	Base Dispatcher
	155.460 MHz	Mobile units to base
	159.165 MHz	Base Dispatcher
	155.445 MHz	Mobile units to base

NEWS MEDIA:

Roanoke Times & World News	463.950 MHz
WDBJ Television	450.250 MHz
WSLS Television	161.640 MHz
WSET Television	161.700 MHz
WFIR / WPVR Radio	166.250 MHz
WLVA (Lynchburg Area)	161.760 MHz
WLLL (Lynchburg Area)	170.150 MHz

COLLEGES:

Virginia Tech Police	155.535 MHz
Hollins College	154.540 MHz

MEDICAL:

Roanoke Memorial Hospital	155.340 MHz (VA Statewide Rescue)
Roanoke Community Hospital	155.400 MHz
Lewis - Gale Hospital	155.280 MHz
Friendship Mannor	155.355 MHz
United Ambulance	155.220 MHz
American Red Cross	47.420 MHz (Nationwide Freq)

Non-Sensitive FEDERAL:

Federal Aviation Agency	166.175 MHz (164.050 MHz input)
U.S. Forest Service, Jefferson Natl	171.575 MHz (172.250 MHz input)
Geo Washington Natl	171.525 MHz (172.325 MHz input)
Veterans Administration	168.525 MHz (168.000 MHz input)
Med Center Paging	164.100 MHz (One way paging freq)
Blue Ridge Parkway Ranger Dispatch	167.175 MHz (166.375 MHz input)

VIRGINIA STATE GOVERNMENT, Roanoke Area Transmitters:

Department of Corrections	39.120 MHz (Simplex dispatch)
Department of Transportation	47.300 MHz (Simplex dispatch)
State Forest Service	159.415 MHz (Simplex frequency)
State Forest Service	151.415 MHz (159.225 MHz input)
State Fish & Game Officers	159.435 MHz (151.340 MHz input)

SOME GENERAL MONITORING FREQS, Surrounding Roanoke Area:

Bedford County: Sheriff, 453.700 MHz; Fire 460.600 MHz
Rescue: 462.975 MHz and 46.000 MHz
Bedford City: Police, 39.600 MHz; Fire & Rescue, 45.200 MHz
Botetourt County: Sheriff, 39.420 MHz; Fire / Rescue, 45.400 MHz
Craig County: Sheriff, 39.480 MHz; Fire / Rescue, 39.500 MHz
Franklin County: Sheriff, 39.400 MHz; Fire / Rescue 39.900 MHz
Floyd County: Sheriff, 39.720 MHz; Fire / Rescue 45.320 MHz
Montgomery County: Sheriff, 39.200 MHz; Fire / Rescue 45.320 MHz

MONITORING PRINCE WILLIAM COUNTY VIRGINIA

PRINCE WILLIAM COUNTY POLICE: Dispatch Signals used are the standard APCO signals for Virginia. See Page 53 of Virginia State Police article RCMA NEWSLETTER, April 83.

Dispatch Frequencies:

West Dispatch - 453.475 MHz (Repeater)
East Dispatch - 453.375 MHz (Repeater)
"Channel 3" 453.150 MHz (Repeater - Car to Car, Speciality Use)
Metro Intersystem Police - 453.550 MHz

PRINCE WILLIAM FIRE and RESCUE Frequencies:

Main Fire Dispatch	154.325 MHz	
Fire Ground F1	154.370 MHz	
Fire Ground F2	154.445 MHz	
Metro Fire Mutual Aid	154.280 MHz	
"Med Call" Frequency	462.950 MHz	(Repeater)
"Med Call" Frequency	462.975 MHz	(Repeater)

"Med" 1 & "Med" 6 are used in this area
463.000 MHz / 463.125 MHz

STATION LOCATIONS and CALL NUMBERS:

Station 1	Manassas Fire Dept and Rescue
Station 2	Occoquan Fire and Rescue
Station 3	Dumfries Fire and Rescue
Station 4	Gainesville Fire and Rescue
Station 5	Nokesville Fire and Rescue
Station 6	Coles District Fire and Rescue
Station 7	Lake Jackson Fire and Rescue
Station 8	Yorkshire Fire and Rescue
Station 9	Manassas Park Fire and Rescue
Station 10	Dale City Vol Fire Dept
Station 11	Stonewall Fire Dept
Station 12	Woodbridge O.W.L. Fire Dept
Station 13	Dale City Vol Fire Department
Station 14	O.W.L. Fire Department
Station 15	Evergreen Fire Department

O.W.L. - Occoquan : Woodbridge : Lorton

Some additional notes: Prince William County School Board: 45.320 MHz,
Northern Virginia Electric Company:

153.470 MHz (simplex)	Stafford Transmitter
153.470 MHz (repeater)	Manassas Transmitter
158.190 MHz	Leesburg Transmitter

Virginia Department of Transportation
47.340 MHz (simplex) & 47.280 MHz (simplex)
Prince William County Jail: 155.940 MHz
Prince William Public Works: 45.120 MHz

Manassas City Police: F1 453.200 MHz, F2 453.425 MHz
Manassas Park Police: 453.775 MHz

(Editor's Note: Special thanks to Mark, VA-051, who helped with this information!)

MONITORING CHARLOTTE COUNTY, FLORIDA

From: Joe, MD-015

Charlotte County Civil Defense: 154.830 MHz (Englewood Transmitter Site)
Englewood Vol Fire Department: 46.000 MHz; 46.060 MHz; 46.180 MHz
Charlotte County Mosquito Control Authority: 155.745 MHz
Charlotte County Board of Health: 158.745 MHz
Charlotte County Schools: 158.805 MHz
Charlotte County Hurricane Shelter Net: 155.100 MHz
Charlotte County Fire Dispatch: 154.355 MHz
Charlotte County Hospital Net: 155.280 MHz (Wide area Recsue & EMS Frequency in Fla.)
Englewood Water Control District: 155.865 MHz
Charlotte County Highway Department: 159.165 MHz

Lemon Bay Emergency Ham Traffic Net:
146.775 MHz (Repeater) Thursday at 7:30PM
146.795 MHz (Repeater) Port Charlotte Transmitter
145.130 MHz (Repeater) Venice Transmitter

(Editor's Note: There is an Amateur Radio Teletype Repeater located in Englewood, FL. This repeater is operated on 146.700 MHz (146.100 MHz input). The repeater operates at 45 baud (60 words per minute) at 850 shift (normal amateur radio teletype is 170 shift but this is an old commercial machine, so it is still operated at 850 shift.)

Elli, FL-169, sends in an interesting question. Why don't EMS units in the state get a standard signal code. If any of you members have EMS codes of your area, please send them in along with a description of your local system. This makes for very interesting reading. Since Elli is mainly interested in EMS, she sends in this listing for MARTIN COUNTY, FL:

Martin County Fire:	154.010 MHz	
City of Stuart Fire:	154.980 MHz	F1 Dispatch
City of Stuart Fire:	154.310 MHz	F2 Dispatch
City of Stuart Fire:	154.445 MHz	F3 Dispatch
Local Police Intersystem:	155.370 MHz	Used state-wide by most PDs
Martin County EMS Dispatch:	462.975 MHz	Repeater System
(Martin County uses "MED 7"	463.150 MHz	Vehicle uses 468.150 MHz

MONITORING COLUMBIA, SOUTH CAROLINA

Columbia Police Department:
F1 460.125 MHz (Repeater), F2 460.225 MHz (Repeater), F3 460.475 MHz (Repeater)
F4 460.025 MHz (Repeater), Forest Acres PD 460.075 MHz (Repeater)
Columbia Fire Department:
F1 453.100 MHz (Repeater), F2 453.400 MHz (Repeater), F3 453.450 MHz (Repeater)
Lexington County Sheriff:
F1 460.100 MHz (Repeater), F2 460.200 MHz (Repeater)
Richland County Sheriff:
F1 460.375 MHz (Repeater), F2 460.500 MHz (Repeater)
West Columbia Police: Columbia Airport Police:
F1 460.150 MHz 157.760 MHz
University of South Carolina, Campus Police:
453.825 MHz (Repeater)
Civil Defense (Columbia Repeater Output Frequency): 453.925 MHz
Civil Air Patrol (Columbia Repeater Output Frequencies): 148.150 MHz & 169.745 MHz
Columbia Ambulance Service Dispatch: 158.805 MHz
"Bad Checks" Information Frequency: 158.760 MHz

STATE OF SOUTH CAROLINA - Columbia Transmitter Site Frequencies:
South Carolina Highway Patrol:
F1 42.100 MHz, F2 42.260 MHz, F3 42.340 MHz
F4 42.080 MHz, F5 42.260 MHz, F6 42.380 MHz
(Note: F5 is simplex, car to car)
SCHP Base to Base: 155.955 MHz and 163.200 MHz

South Carolina Dept. of Corrections: 155.640 MHz
South Carolina DC Div of Youth Servies: 39.960 MHz
South Carolina Wildlife Enforcement: F1 31.020 MHz, F2 31.060 MHz, F3 31.180 MHz

FORT JACKSON: MP 163.5625 MHz; Range Safety 164.945 MHz, 165.0625 MHz, 173.4125 MHz

MONITORING MYRTLE BEACH, SOUTH CAROLINA

Myrtle Beach Police: 154.800 MHz and 154.860 MHz
Myrtle Beach Fire and Rescue: 154.310 MHz, 154.180 MHz; 155.290 MHz, 155.1609 MHz
Horry County Sheriff (Myrtle Beach Transmitter): 154.725 MHz; Rescue 155.400 MHz
Surfside Beach Fire Rescue: 154.310 MHz
Conway Police: 156.210 MHz

PROFILE OF THE FIRE DEPARTMENT COLUMBIA, SOUTH CAROLINA

Population: 113,000
Headquarters: 1001 Senate Street
Workweek: 56 hours per week

Area: 106 Square Miles
Fire Fighters: 257
Frequencies: Three repeaters

Frequencies and assignments:

F1 453.100 MHz Operations
F2 453.400 MHz Fireground
F3 453.450 MHz Administrative

Stations and Equipment:

1001 Senate Street (Headquarters)	Engine 2, Engine 8, Ladder 1, Ladder 14, Rescue 15, Rescue 16, K 64.
2847 Devine Street	Engine 22, Engine 23
1901 Harden Street	Engine 28, Ladder 22
2622 Main Street, N. Columbia	Engine 29
4005 Ensor Street, Eau Claire	Engine 31
7124 Frontage, Dentsville	Engine 3, Engine 24
1224 Briargate St., St Andrews	Engine 25, Engine 30
2701 The Boulevard, Ind. Park	Engine 27

(This information courtesy American Fire Services.)

NORTH CAROLINA AMATEUR REPEATERS

Since amateur radio operators play a very valuable part in public safety communications, the following is a list of VHF and UHF amateur repeaters in the State of North Carolina. These frequencies can provide interesting and sometimes valuable information during times of local emergency. This listing, provided by the REPEATER JOURNAL, shows only the city or transmitter location for the repeater and the transmitter output frequency. Many of the repeaters are owned by clubs and others by individual amateur operators. Nets, swap meets and emergency communications are just a small part of the communications you will hear.

Ahoskie: 145.130, 146.910... Albemarle: 146.985... Asheboro: 147.225... Asheville: 146.835, 146.760 (Mt Pisgah Transmitter site); 147.910 (Spivey Mountain Transmitter site)... Benson: 147.270... Bodie Island: 146.835... Boone: 147.360... Brevard: 147.195... Burgaw: 146.940... Burlington: 146.670, 147.075... Burnsville: 147.375... Canton: 145.350... Carthage: 147.240... Charlotte: 145.170, 145.230, 145.290, 145.350, 147.500, 146.775, 146.940, 147.060, 147.015, 147.390... Cherryville (Bakers Mountain): 145.150... Concord: 146.655... Crowders Mountain: 145.450... Dillsboro: 146.985... Dunn: 146.700... Durham: 146.820, 146.940... Eden/Mayodan: 147.240... Eden/Stoneville: 147.390... Elizabeth City: 147.060... Elizabethtown: 146.775... Erwin: 147.030... Fayetteville: 146.806, 146.910, (Ft Bragg) 147.330... Forest City: 146.670, 147.240... Franklin: 147.240, (Cowee Bld site) 145.490... Gastonia: 146.805, (Spencer Mountain) 147.120... Goldsboro: 146.850... Greensboro: 145.250, 146.610, 146.760, 146.865, 147.030, 147.210... Greenville: 145.350, 147.360, 147.360... Grifton: 146.685... Hendersonville: 146.640, (Pinck Mt) 145.270, (Stoney Mt) 147.255... Hickory: (Brighton Mt) 146.850... High Point: 145.110, 147.165, 147.000... Hillsborough: 147.225... Hillsville: 147.375... Hope Mills: 147.045... Jacksonville: 147.000, 147.300... Lake Toxaway: 147.135... Laurinburg: 146.625... Lenior: 147.330... Level Cross: (Channel 2 TV Tower) 146.790... Lewisville: 145.210... Lexington: 146.910... Lillington: 145.470... Lumberton: 147.360... Maco: 147.060... Madison: 146.895... Manteo: 146.940... Marion: (Old Fort) 147.105... Mayodan: 145.150... Monroe: 147.900... Monroe: (Ucars) 147.105... Morganton: 147.150... Mt Airy: 146.970, 147.180, (Fancy Gap) 145.130... Mt Mitchell: 145.190... North Wilkesboro: 145.370... New Bern: 146.610... Newport: 145.450... Old Fort: 146.955... Oxford: 145.170... Raleigh: 145.270, 145.490, 146.640, 146.730, 146.880, 147.150... Reidsville: 146.850... Roanoke Rapids: 147.030... Roaring Gap: 146.820... Robbinsville: 147.045...

Rockingham: 146.995... Rocky Mount: 147.120... Salisbury: 146.730... Sanford: 147.180... Shelby: 146.880, 147.345... Smithfield: 146.970, 147.390... Spring Lake: 146.715... Statesville: 146.685, (Asbury Mt) 147.045... Tuckasegee: 147.300... Union Cross: 147.315... Wadesboro: 146.835... Waxhaw: 146.895, 146.865... Waynesville: 147.270... Whiteville: 147.210... Williamston: 145.410... Wilmington: 146.730, 146.820, 147.180... Wilson: 146.760... Winston Salem: 146.640, 145.470, (Sauratown Mt) 145.390.

220 MHz Amateur Band

Asheville: 224.600, (Mt Pisgah) 223.940, 224.240... Charlotte: 224.400, 224.680... Cherryville: 224.960... Fayetteville: 224.020... Greensboro: 224.820... Hickory: 224.020... High Point: 223.920... Hillsborough: 223.940... Lenior: 224.160... Linwood: 223.980... Locust: 224.000... Morganton: 224.800... Mt. Mitchell: 224.540... Raleigh: 224.640... Rocky Mount: 223.960... Salisbury: 224.300... Winston Salem: 224.640... Westfield: (Sauratown Mt) 224.700 (RTTY), 224.880.

440 MHz Amateur Band

Asheville: (Mt Pisgah) 444.900... Canton: (Chambers Mt) 444.800... Charlotte: 449.600, 444.600, 444.850... Fayetteville: 444.400... Greensboro: 444.900... Greenville: 444.800... High Point: 442.900... Hillsborough: 444.100... Locust: 443.700... Mt Mitchell: 443.650... Rocky Mount: 444.700... Winston Salem: (Sauratown Mt) 443.000.

50 MHz Amateur Band

Cary: 53.350... Charlotte: 53.030... Hendersonville: 53.010, 52.525... Hickory: 53.470... High Point: 53.150... Newport: 53.010... Roanoke Rapids: 53.030... Statesville: 53.670.

Editor's Note: You will find there is considerable activity on some repeaters, and some strange sounds on others. Most amateur repeaters are used for normal communications, however, a few of the "machines", as the hams call them, are links for other repeaters, or in some cases, transmit radio teletype or slow scan television. There are some repeaters which are considered "wide area" repeaters. These are noted by mountain transmitter locations or are just known to the hams that use them. The 146.880 Raleigh repeater is a wide area machine and serves all of eastern North Carolina. It is not unusal to hear two mobiles over 200 miles apart talking to each other on a wide area machine.

You will also hear things from time to time that are completely unheard of in normal commercial radio. For example, the 147.225 repeater in Hillsborough is "linked" via 220 to a repeater in Lynchburg, Virginia, and it is not unusal for a mobile unit on 220 in Lynchburg to talk to a ham with a walkie-talkie in Hillsborough... because the machines are linked together via some very technical means. Usually, hams will get more coverage with less power then most commercial repeaters. It will be interesting to see what you get in your area.

Another comment... Ham VHF and UHF communications do some very special things, and you will find VHF and UHF repeaters which have "remoted bases" on 50 MHz and 29 MHz. I have talked to Rome and other places in Europe with nothing but my 3 watt walkie-talkie, through a repeater with a "remote base". There is a system in the souhtwest USA where a ham can link several repeaters together with tones, and then communicate from El Paso, for example, to a ham on a ship off the California coast off San Francisco, all on VHF or UHF links. Those of you living in California should listen to 146.820 sometime. The hams in California have a large number of repeaters on this frequency linked together, and the communication reaches all over southern and certral California, allowing very wide coverage and communications for great distances on just a walkie-talkie. Very interesting monitoring, especially during emergency times!

GENERAL COMMENTS

All of you South Florida radio buffs make certain you make plans to attend the Greater Miami "Tropical Hamboree" which will be held at the Flagler Dog Track in Miami on February 4th and 5th! The radio show is perhaps the largest in Florida, running a race each year with the March Orlando event to see who is the larger attraction! The event is sponsored each year by the Dade Radio Club. Admission for both days is $5.00 at the door. Doors open at 9AM and there are hourly prize drawings. This year there will be technical forums, DX Forum and Dinner, ARRL programs, RTTY Forum, FCC amateur test exams, organizational meetings, new product exhibits, dealer specials on equipment, super large covered swap shops, personal computer forums, international displays and QCWA meetings. There is free overnight parking on the Dog Track lot for RVs. Remember, you don't have to be an amateur to attend. I will be there and will have a swap table, so if you pass, say hello!

Other events for February are: Feb 19 Hamfest - Elkin NC; Feb 26 Winterfest - Vienna VA; Feb 26 Hamfest - Fayetteville WVA. Ask any amateur radio operator in the local area for directions and details. (This information courtsey REPEATER JOURNAL.)

For those of you who like to make really advanced plans, remember that two of the "really big ones" will be coming in March! The Greater Orlando Hamfest will be held again on the same weekend as the Greater Charlotte Hamfest - both on March 17th and 18th. I hope to have more details next month!

Many of you have asked questions about the "Repeater Journal" that I mention each month when I list the coming events. This is a publication that comes out four times a year. The Repeater Journal is published by the Southeastern Repeater Assn., Post Office Box 5655, Greensboro, North Carolina 27435. The cost of a subscription is only $4.00 a year. Other than major news about VHF and UHF amateur activities, there is a complete and very up-to-date listing by city and by frequency of every operating amateur repeater in Virginia, North Carolina, South Carolina, Tennessee, West Virginia, Georgia and East Kentucky! It is the most up to date listing available! (You Florida listeners can get a listing of the current Florida repeaters by writing the Florida Repeater Council, P.O. Box 17317, Tampa FL 33682 - Remember to send a stamped, self-addressed business envelope with your list request!)

This column is as result of those members who have submitted material to this editor. Remember, your editors can not make your club publication interesting without your help and participation. Please make it a point to send something in this month about what you monitor!

PUBLIC SAFETY — SOUTH CENTRAL:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas:

Ken Pehl, 108 E. Centre St., Fredericksburg, Texas 78624.

Hello and welcome to the February column of Public Safety-South Central. We have some interesting items in the mail bag this month, so let's get cracking.

First off, we got some feedback on the December column's mention of the rumor that the FCC was not issuing further VHF high band licenses in the state of Texas in the Public Safety Radio Services. Our illustrious "FCC Topics" editor, George DuBois, wrote to clarify a few points. In George's own words: "Regarding your December column. It is probably the frequency co-ordinator that won't recommend any high band frequency for licensing. The FCC will license anyone on any frequency in the public safety radio services with the co-ordinator's OK, since the public safety services are so well coordinated. There are half-a-dozen outfits that handle coordination in the public safety services. APCO (Association of Police Communications Officers), of course, being the largest, handling police, fire, and, I think, now the forestry-conservation radio service. There is no recognized coordinator in the special emergency radio service.

"Also don't forget that inter-service sharing was implemented last year (by the FCC). (This means) an applicant in a public safety service in which all the channels are filled may apply for a channel in any of the other public safety services. Likewise, an applicant for an industrial radio service channel may apply for a channel in another industrial service. In the public safety services all an applicant would do is get a letter stating that all the channels in his service are in use and (obtain) a frequency recommendation from the coordinator in the other service, unless, of course, the same person coordinates for both services involved (which is sometimes the case)." (from George, OR-001)

Thank you, George, for taking time to fill us in on this subject. In the behind-the-scenes process of an application for an FCC license, much paperwork is done before the application is ready to be sent to Washington, DC for rubber stamp approval and computer assigned callsign to the application. The regional frequency coordinator for that radio service must be consulted and his recommendation for that license application on that frequency must be obtained in writing and accompany the application. So what George just said, dear readers, is that we have to be on our toes from now on. This means, in the State of Texas, checking for police and fire activity on both their usual channels and on some of the other public safety channels as well, most likely the highway maintenance allocated channels and the forestry-conservation channels, since these services

are not filled up to the extent of the police and fire services. Further, this means that I, your editor, expect reports from you, the listener, on your area's police, fire, and maybe even hospital/ambulances that use channels other than the "normal" channels, along with your regular reports, of course. Above all, stay alert and write in!

In the I-made-a-boo-boo department: In checking back through some old reports I see I may have over-looked a few single item reports, since I fail to see them in recent columns. Thus... from Gary, TX-94: The Rusk County (Texas) central fire dispatch is now operational on 154.385, simplex at the moment (although licensed as a repeater). Ten departments are being dispatched on this system. ...from David, LA-31: The Covington (Louisiana) Police Dept. dispatch is on 39.16 MHz. Bogalusa PD dispatch -- 39.64. Franklinton PD dispatch -- 39.84. ...Sorry for the delay, gentlemen. My notes are not as organized as they should be at times.

And speaking of Louisiana, we have new reports from the Bayou State this month, as well. The Lousiana Frequency Exchange (the name of the Louisiana monitoring listener's group) sent me a sample of their monthly bulletin. I found it very impressive. Their headline banner proclaims "serving aviation, marine, public safety, shortwave, and amateur radio enthusiasts". If you would like more info on how to receive their fine bulletin inquire to: Louisiana Frequency Exchange, P.O. Box 45913, Baton Rouge, LA 70895. Attention: Trey Oliver, editor. (I am sure an SASE would be appreciated.) The sample bulletin I received had listings covering ham, aviation, business, industrial, federal, railroads, and shortwave. Sorry, folks, no public safety info to sample here this month.

From David, LA-31: David wrote in to ask our area readers for some help. Some Louisiana Frequency Exchange members in the Baton Rouge area have been receiving some police/law enforcement type traffic on 158.730 via tropo propagation. The callsign used is either KLY 300 or something that sounds similar. No one, as yet, has been able to pin-point where this is coming from and they are asking for our area readers to help in ID'ing this channel and traffic. If anyone is familiar with this frequency and call, won't you please write to our Louisiana friends to tell them. Also, your editor here (me) would like to know as well.

From Robert Shay (AL-?), a prospective new recruit from Alabama: Robert wrote in to inquire about the RCMA. I certainly hope that he decides to join us. Robert's letter was forwarded to me by Carol Ruth, our ever efficient managing editor. (Thank you, Carol.) Robert wishes to obtain some information on any Houston County (AL) and Dothan (AL) radio systems, plus their public safety department's signal codes. Robert, furthermore, needs a copy of the Alabama and Florida state signal codes. Is there anyone out there who can help Robert out? In addition, Robert sent a list of his area's frequencies, which he shares with us:

Dale County Sheriff and other PD's	155.550	
Daleville Police/Fire Rescue Squad	156.015	
Houston County Sheriff Dept.	158.730	
Dothan PD	159.090	
Enterprise PD	155.130	
Alabama State Troopers (dispatch)	155.475	base to mobiles
Alabama State Troopers (mobiles)	155.445	mobiles to bases
Alabama State Police Network	155.010	statewide common

Robert sent the Florida state police net channel (155.370) and some frequencies for Ft Rucker MP's, but that is for another editor's column.

Thank you, Robert, for your excellent input. Please keep up the good contributions once you join the RCMA.

From J. A. Tarvin, still another prospective member, from Arkansas: Still another inquiry concerning the RCMA, again forwarded by Carol Ruth. (Another thanks, Carol.) I also hope J.A. joins as well. J.A. sent a list of frequencies he says are not listed in the 1983 POLICE CALL directory. J.A. gives the frequencies as:

Little Rock PD--		Little Rock FD--
474.750	474.7625	475.500
475.800	474.075	475.300
475.000		

Since the UHF-T band is not allocated for use in Little Rock, Ark. (at least to

my knowledge), this editor believes these are image frequencies. I am not sure what type scanner J.A. is using, so I can not determine for certain which are the correct frequencies that J.A. is listening to. Perhaps one of our readers can help out? J.A. is also looking for the frequency to the PD's "Red 9" ch. Can someone please advise?

Thanks, J.A., for writing in. We'll see if we can find out for you.

And now for some Texas info. From Mike, TX-81: Mike noticed in comparing a 1980 and a 1981 DPS Communications map, that the 1981 map no longer depicted a remote relay that used to be located in Bowie County (TX), west of Texarkana. From license listings, this was the Cusseta site, callsign KYL 816. Mike speculates that this could have been changed to Texarkana proper, much like the Sherman/Howe DPS site change (as reported in the January 1984 column), since he has never heard anything but KYL 816 on the air. (Texarkana is licensed for KYL 815.) Does anyone have any experience listening to this particular station? If so, please write in.

Mike is also curious (as is this editor) about the low band frequency for the TABC on 39.36 MHz. Normally this could probably be dismissed as the old low band day's counterpart to their present day's high band system. However, as far as can be determined, this license did not begin to show up in any frequency license file we can find until 1979. Any ideas, anyone? Is it just a case where the license was expired for that frequency or is TABC up to something sneaky?

Thank you, Mike, for those comments. Certainly food for thought and something to investigate, anyway.

As of this month, the RCMA has changed their policy regarding the publication of 10-codes. Somewhere in this issue (or last month's issue) is a complete explanation of the change and the reason for it. In following the new policy, please refer to the complete APCO 10-code list elsewhere in this issue--ONLY those codes and meanings different from the master 10-code list are listed below. All the remaining codes are the same as the master list:

From Phil Porter, TX-97:

TEXAS DEPT OF PUBLIC SAFETY 10-CODE
used by the DPS and numerous county S.O.'s

10-10	Negative;No	10-40	Subject detained;expedite
10-11	___on duty	10-43	Request criminal history (CCH)
10-12	Stand by	10-54	Silent pursuit (no lights;no siren)
10-14	Message/Information	10-71	Officer needs assistance
10-15	Message delivered	10-72	Check for welfare or safety of officer ___ at ___ location.
10-16	Reply to message		
10-17	En-route (to)	10-73	Advise your current status/ are you OK?
10-19	(In) contact		
10-26	Estimated time of arrival	10-81	Breathalyzer assistance needed
10-30	Danger/caution	10-86	Officer/operator on duty
10-31	Pick up	10-95	Prisoner/subject in custody (number of persons specified)
10-32	___units needed (specify)		
10-34	Time check	10-96	Mental subject
10-35 thru 10-39	(reserved for future)	10-97	Known offender
		10-98	Criminal history indicated

Note: 10-51, 10-52, 10-56, 10-57, 10-70, 10-74, 10-76, 10-77, 10-82, & 10-83 are not used in the DPS' official list of 10-codes.

From Brent, TX-64: Brent writes in to correct an item in the December 1983 column. Brent advises that Lufkin Fire Dept.'s repeater is 154.445 repeater output (153.890 repeater input), not as listed in the December column. (editor's note: My apologies for any inconvenience I may have caused for inverting the frequencies.) Brent advises further, Lufkin EMS UHF MED system was changed to the frequency 463.050 (MED 3) after the column was printed up. (Editor's note: Paranoia--is someone in that dept. reading our column?) And Brent adds some light to the December column's request for further info on the TX Forestry Service:

TEXAS FORESTRY SERVICE (TFS)
AREA 3

Ch 1 151.475 -- TFS Inter-system--statewide
Ch 2 159.405 -- TFS Area 3 primary ch. (KKB 849 bases;KA 4905 mobiles)

other related frequencies:
164.825 -- communications between TFS and USFS during fires near a national forest area.
168.750 -- ID's as "Federal". State and federal aircraft periodically give locations on this channel.
31.42 -- ID's as "Fire Control". Gives weather to all other TFS area offices daily between 4 and 5 PM.
171.475 -- Angelina National Forest--maintenance operations. Used by "Federal" station mentioned above.

UNITS:
352--355 = TFS/Angelina County based fire plows
Easy 1 = Area 3 patrol aircraft (TFS)
Sugar 1 = Area 4 patrol aircraft (TFS)
Charlie 2 = USFS patrol aircraft (?) (unconfirmed)

On the subject of Texas DPS remote relays, Brent says the DPS remote base in Jasper (Jasper County) is accessed by the Lufkin DPS office by using the frequency 154.695 (uplink). Also Brent has been told the Walker Co. based DPS units are temporarily using the Lufkin office for their communications. The Coldspring remote relay site is being utilized for the traffic. Brent does not know the downlink frequency for the Coldspring relay site. Although it is licensed for 159.210, he only hears Sabine Co. based units using the Jasper relay on that frequency to talk back to the Beaumont DPS office.

Thank you, Brent, for that information. We all certainly appreciate your continued contributions in support of this column. Keep up the good work.

From Brad Carpenter (ex-OH-138), from Ft. Worth: Brad writes to tell us he has heard Ft Worth PD refer to a ch 7 and ch 8. Brad does not know the frequencies. Only six channels are listed in POLICE CALL for their UHF system. Does anyone have any ideas? Brad has noted FWPD activity on 158.790 and 158.730 (paging) but these are not the ch 7 & ch 8. Brad notes FWPD patrol unit numbers evidently are broken down into a letter, indicating the district (Districts A thru H), plus a three digit number. The first digit number indicates the shift. For example, H-113 = 1st shift;H-213 = 2nd shift;H-313 = 3rd shift. The last two digits apparently indicate the individual units. J-units are the traffic division and L-units are crime scene units. Also heard are units with letters K,L,R,S,T,V, & K9 as prefixes. FWPD signal codes are being used by the cities of Bedford, Hurst, and Halton City PD's as well. Brad also heard a road dept on 159.165 but cannot pinpoint the agency. Any ideas, anyone? He also has been hearing DPS Ch 7--155.445 (very active), has monitored 159.465-agency unknown. Thank you, Brad. We continue to look forward to your support for this column.

From an anonymous source: A few months ago we ran the Oklahoma Highway Patrol 10-codes. We have been informed by our anonymous source that the code list is outdated and sent us a newer list. Please note the following is for the State Of Oklahoma, Dept of Public Safety. For this list only, refer to the May 1983 issue of the RCMA Newsletter (page 32) for the following changes to that May 1983 listing:

OKLAHOMA DEPT OF PUBLIC SAFETY 10-CODE
(please note this is for Oklahoma)

10-23 Officer in trouble;location ___
10-26 Motorist assist;location ___
10-31 Breathalizer operator report to ___
10-32 Is breathalizer available?
10-33 Emergency traffic
10-48 NCIC hit;is it safe to copy info?
10-52 Set up road block at ___
10-53 Discontinue road block authority of ___
10-54 Estimated time of arrival
10-70 Stopping vehicle;may be dangerous, location ___
10-71 Officer is clear from 10-70
10-84 Report to ___ for info.
10-85 Keep vehicle under surveillance, DO NOT STOP.
10-86 Pick up your partner
10-87 Aircraft assignment, location & time.
10-90 Officer welfare contact.
10-97 Arrived at scene.
10-98 Last assignment completed.

Note: 10-34, 10-38, 10-65 thru 10-68, 10-81, & 10-83 have been discontinued.

OKLAHOMA DEPT OF PUBLIC SAFETY
STATION AND UNIT SIGNALS

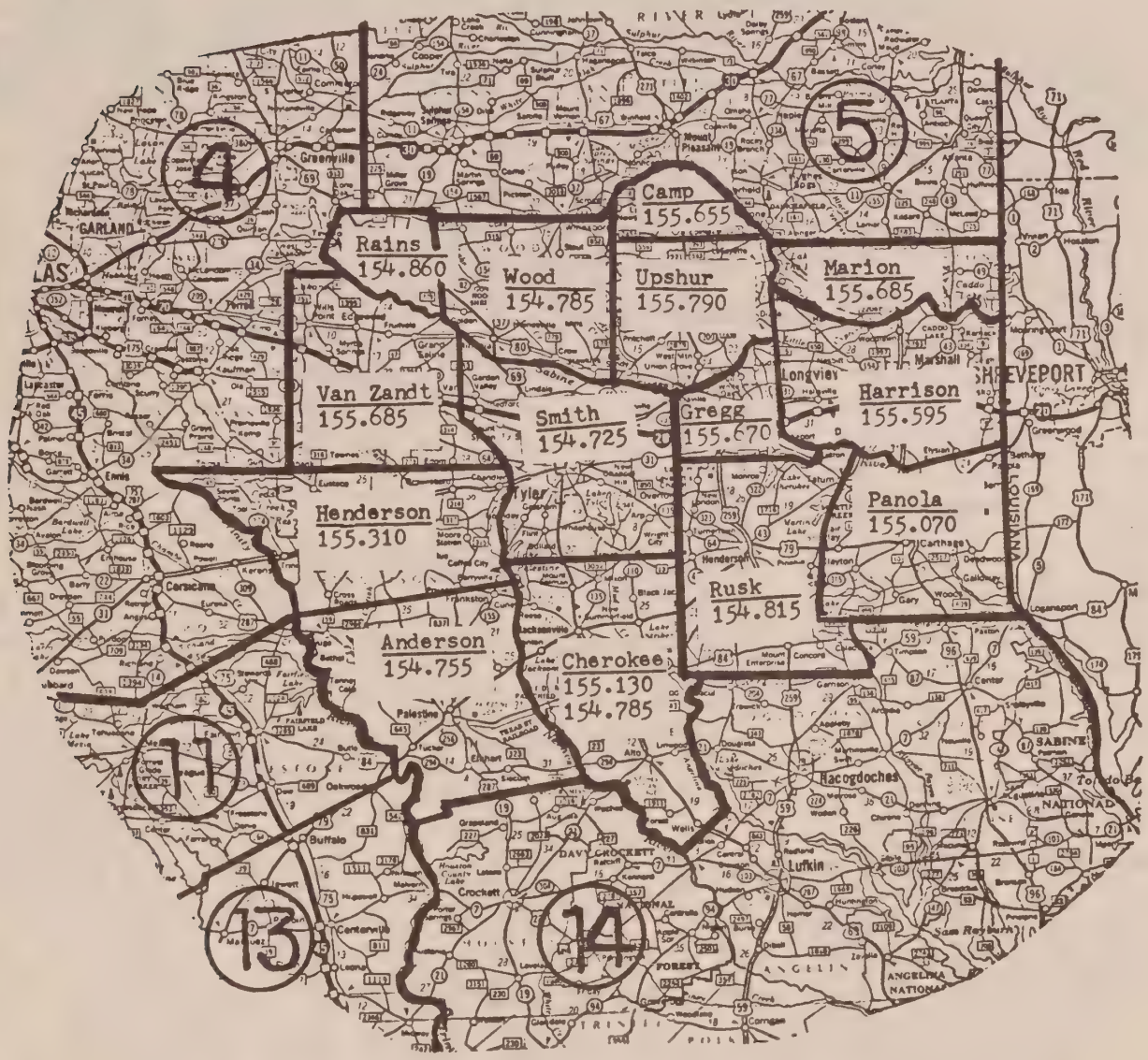
8 - Civil disturbance
9 - Bomb threat
11 - What is my readability?
13 - Unable to copy, change location and repeat

Public Safety - South Central continued

30 - Fatality accident
31 - Drowning;location ___
76 - Accident, seriousness unknown
81 - Minor accident
82 - Major accident
83 - DPS vehicle involved in an accident (state number of vehicles, any injuries, and location)
87 - Intoxicated pedestrian (reported)
88 - Intoxicated driver (reported)
89 - Hit and run (state whether property damage or personal injury)

And now we will close off the column with a few more of Dave's, TX-32, continuing series of travel maps for the state of Texas county sheriff department's primary dispatching frequencies. As always, we thank Dave for his efforts. Furthermore, I wish to thank all of you for your contributions this month. I think our feedback on past columns is an excellent way to open up avenues of communications. We shall see you next month.

6 ETCOG



Region 6 -- ETCOG / East Texas Council of Governments

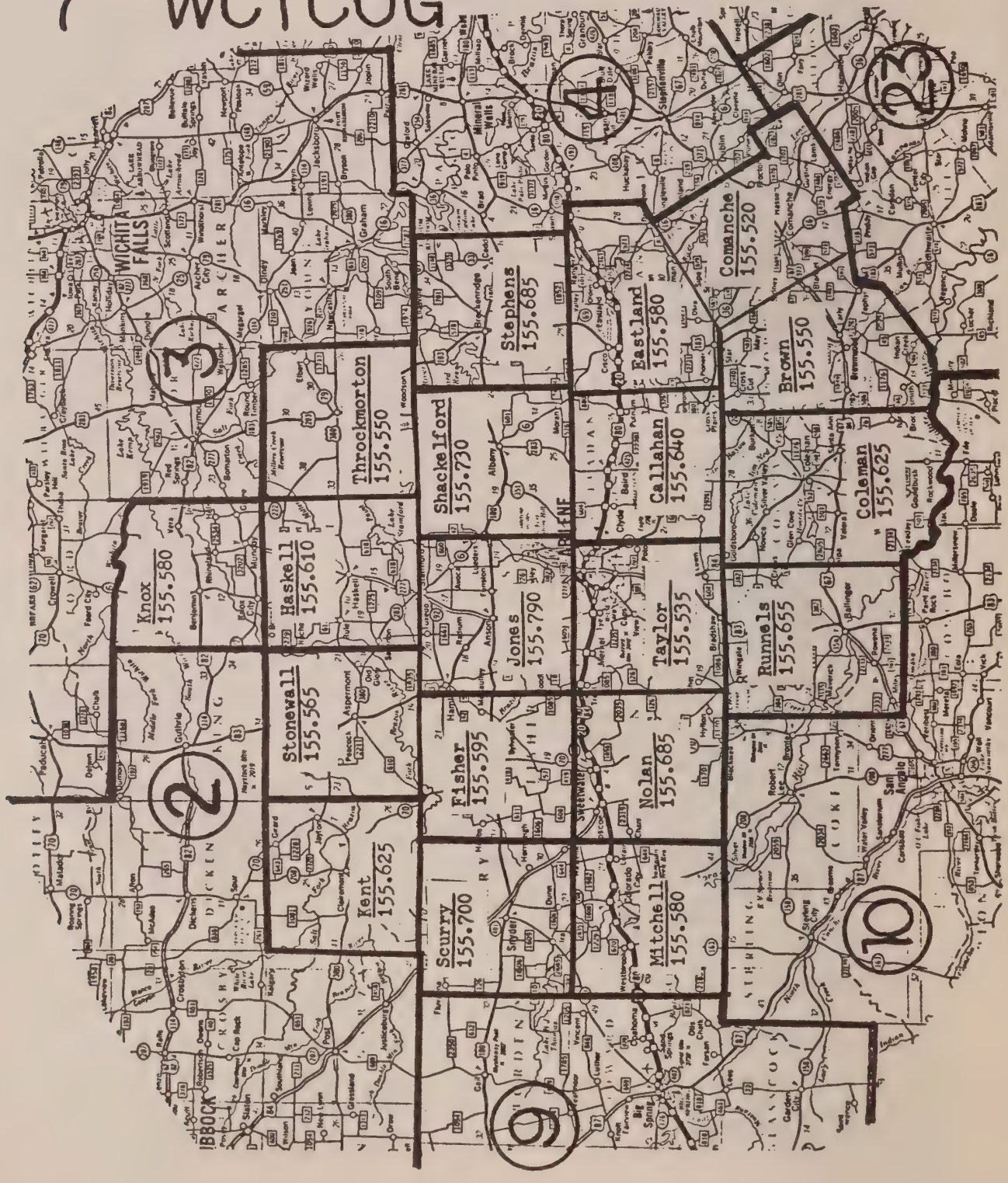
	County	Co.Seat	SD Base/mob	
✓1 -	Anderson	Palestine	154.755/156.090	
2 -	Camp	Pittsburg	155.655/154.740	
✓3 -	Cherokee	Rusk	155.130/154.650	F1
			154.785/155.970	F2

Public Safety - South Central continued

4 -	Gregg	Longview	155.670/154.830
5 -	Harrison	Marshall	155.595/(154.710) (155.700)?
✓ 6 -	Henderson	Athens	155.310/156.030
7 -	Marion	Jefferson	155.685/154.770
8 -	Panola	Carthage	155.070/156.150 (154.710)?
9 -	Rains	Emory	154.860/154.770(?)
✓ 10 -	Rusk	Henderson	154.815/155.850
✓ 11 -	Smith	Tyler	154.725/155.910
12 -	Upshur	Gilmer	155.790/154.890
13 -	Van Zandt	Canton	155.685/154.770
14 -	Wood	Quitman	154.785/155.970

✓ = denotes confirmed from previous columns' reports.

7 WCTCOG



Public Safety - South Central continued

7 -- WCTCOG

West Central Texas Council of Governments

	County	Co.Seat	Sheriff Rptr output/rptr input
1 -	Brown	Brownwood	155.550/154.830
2 -	Callahan	Baird	155.640/154.815
3 -	Coleman	Coleman	155.625/154.860
4 -	Comanche	Comanche	155.520/154.770
5 -	Eastland	Eastland	155.580/154.890
6 -	Fisher	Roby	155.595/155.070
7 -	Haskell	Haskell	155.610/154.770
8 -	Jones	Anson	155.790/154.710
9 -	Kent	Jayton	155.625/154.650
10 -	Knox	Benjamin	155.580/154.845
11 -	Mitchell	Colorado City	155.580/154.890
12 -	Nolan	Sweetwater	155.685/154.830
13 -	Runnels	Ballinger	155.655/154.755
14 -	Scurry	Snyder	155.700/154.800
15 -	Shackelford	Albany	155.730/154.725
16 -	Stephens	Breckenridge	155.685/154.800
17 -	Stonewall	Aspermont	155.565/154.860
18 -	Taylor	Abilene	155.535/154.650
19 -	Throckmorton	Throckmorton	155.550/154.830

(Editor's note: We could use some help in confirming the preceeding, especially the input frequencies.)

PUBLIC SAFETY — NORTH EAST:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — New England states, New York, Pennsylvania, New Jersey, Maryland, Delaware, and District of Columbia:

Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

Welcome to the first issue for 1984. It's hard to believe, but this year represents my final semester of college and, although I have nothing personal against higher education, I'm really excited about leaving school and working full time on my business and editing R.C.M.A. articles.

We're going to spend this month's report mainly on catching up with a back article from our Delaware Valley editor, Tim Leber, and with a page of major frequencies updates and license requests from the state of Connecticut.

PUBLIC SAFETY - DELAWARE VALLEY

As much as I hate to do it, I must start this month's contribution with yet another plea for contributions from the readership. You have read it time and time again, and I know the folks that do contribute get tired of seeing it, but I must say that this section will do well only if you contribute. Several folks have sent in contributions,[this month's feature on Camden County Communications is the work of John Flack, Jr (NJ-167)] and other articles are in the works, but this section is in need of input - especially from Delaware and deep southern New Jersey. Whatever you send will be used (within RCMA guidelines), and all contributions (of whatever size) will be appreciated by the members.

So much for the plea for contributions. Let us get on to business.

CORRECTIONS AND ADDITIONS

Several readers noticed an error in the listings for the Philadelphia Police - due to a typographical error - a "20th" district was listed, this

should read "90th".

Also, in the municipal listings, a low power repeater has just come into service on 453.450 at the Philadelphia International Airport. Output power is roumored to be about 40 Watts. This station covers police operations (except parking police) at the airport.

SCUTTLEBUTT AND WORKS IN PROGRESS

There is some talk of a new communications system for the Philadelphia Police and Fire Department use in the tunnels of the Philadelphia Transit system - we'll be talking to several sources in upcoming days - and should have more information shortly... While we are speaking of new systems, an article on the new Bucks county Police/Fire/Ambulance communications system is in the works.

The major feature is on communications in Camden County, New Jersey

CAMDEN COUNTY COMMUNICATIONS

District	Squad Name	Squad Number
1	Murray-Troutt Ambulance	1
2	Haddon Heights Ambulance	2
3	Bellmawr Emergency Service	3
4	Mount Ephraim Ambulance	4
5	Gloucester City Ambulance	51
	Highland No. 3 Ambulance	53
7	Runnemede F.P. Ambulance	7
8	Erial Ambulance	88
	Glendora Ambulance	89
9	Barrington Ambulance	9
10	14th Ward Ambulance	10
11	Pennsauken First Aid	11
12	Merchantville Ambulance	12
13	Cherry Hill Ambulance	131
	Ashland Ambulance	134
	Cropwell Ambulance	138
14	Haddonfield Ambulance	14
15	Westmont Ambulance	15
	W. Collingswood Hgts. Ambulance	152
16	Collingswood Ambulance	16
17	Woodlynne Ambulance	17
18	Oaklyn Ambulance	18
21	Berlin Ambulance	21
23	Atco Ambulance	23
24	Chesilhurst Ambulance	24
25	Winslow Ambulance	25
	Sicklerville Ambulance	26
27	Lawnside Ambulance	27
28	Lakeside Hospital Ambulance	28
29	Magnolia Ambulance	29
60	Laurel Springs Ambulance	60
61	Clementon Ambulance	61
62	Pine Hill Ambulance	62
63	Lindenwold Ambulance	63
64	Stratford Ambulance	64
66	Voorhees Ambulance	66
68	Gibbsboro Ambulance	68

MOBILE INTENSIVE CARE UNITS

Eastern	"Medic 1"
Southern	"Medic 2"
Northern	"Medic 3"
Haddonfield	"Medic 4"

SUPPORT SERVICES

Camden County Fire Police	5700	Vol. Firefighters Canteen	5150
Emergency Management	5500	County Fire Marshal	C.F.M.
Lower Cam. Co. Canteen	805	Chief, Communications	A-1

FIRE DISTRICTS

District	Department	Station
1	AUDUBON	
	Audubon No. 1 Fire Co.	11
	Defender Fire Co.	12
	Audubon Heavy Rescue	13
2	HADDON HEIGHTS	
	Haddon Heights Fire Dept.	21
3	BELLMAWR	
	Bellmawr No. 1 Fire Co.	32
	Bellmawr Park Fire Co.	33
4	MOUNT EPHRAIM	
	United Fire Co. No. 1	41
	Mount Ephraim Fire Co. No. 2	42
5	GLOUCESTER CITY	
	Gloucester City No. 1	51
	Pine Grove No. 2	52
	Highland No. 3	53
	Gloucester Heights No. 4	54
7	RUNNEMEDE	
	Runnemede Fire Co.	75
8	GLOUCESTER TOWNSHIP	
	Glendora Fire Co.	81
	Chews Landing Fire Co.	82
	Blenheim Fire Co.	83
	Blackwood Fire Co.	84
	Lambs Terrace Fire Co.	85
	Erial Fire Co.	86
9	BARRINGTON	
	Barrington Fire Co.	91
10	CAMDEN CITY	
	Camden City Fire Dept	100
11	PENNSAUKEN TOWNSHIP	
	East Pennsauken Fire Co.	111
	Pennsauken No. 2 Fire Co.	112
	Bloomfield Fire Co.	113
	Delaware Gardens Fire Co.	114
	Delaview Fire Co.	115
	Highland Fire Co.	116
12	MERCHANTVILLE	
	Niagara Fire Co.	129
13	CHERRY HILL TOWNSHIP	
	Woodland Fire Co.	131
	Erlton Fire Co.	132
	Deer Park Fire Co.	133
	Ashland No. 2 Fire Co.	134
	Cherry Hill Dist 5 Fire Co.	135
	Woodcrest Fire Co.	136
	Cherry Hill No. 1 Fire Co.	137
	Cropwell Sub-Station	138
	Springdale Sub-Station	139
14	HADDONFIELD	
	Haddon Fire Co. No. 1	141
15	HADDON TOWNSHIP	
	Westmont Fire Co.	161
	W. Collingswood Hgts. Fire Co.	162
17	WOODLYNNE	
	Woodlynne Fire Co.	173
18	OAKLYN	
	Oaklyn Fire Dept.	183
19	AUDUBON PARK	
	Audubon Park Fire Co.	193
21	BERLIN BOROUGH	
	Berlin Fire Co.	211
22	BERLIN TOWNSHIP	
	West Berlin Fire Co.	222
23	WATERFORD TOWNSHIP	
	Atco Fire Co.	232
	Louden Fire Co.	233
	Dunbarton Fire Co.	234
24	CHESILHURST	
	Chesilhurst Fire Co.	241
25	WINSLOW TOWNSHIP	
	Winslow Fire Co. #1	251
	West Atco Fire Co.	252
	Cedarbrook Fire Co.	253
	Tansboro Fire Co.	254
	Florence Fire Co.	255
	Albion Fire Co.	256
	Sicklerville Fire Co.	257
	Waterford Fire Co.	258
	Elm Fire Co.	259
26	ANCORA STATE HOSPITAL	
	Ancora Fire Dept.	261
27	LAWNSIDE	
	Lawnside Fire Co.	272
28	LAKELAND COUNTY HOSPITALS	
	Lakeland Fire Dept.	281
29	MAGNOLIA	
	Magnolia Fire Co.	291
34	BROOKLAWN	
	Brooklawn Fire Co.	344
60	LAUREL SPRINGS	
	Laurel Springs Fire Co.	602
61	CLEMENTON	
	Clementon A.A. Fire Co.	611
	Watsontown Fire Co.	612
	East Clementon Fire Co.	613
62	PINE HILL	
	Amber Terrace Fire Co.	624
	Eagle Fire Co.	625
	Pine Hill No. 1 Fire Co.	626
63	LINDENWOLD	
	Lindenwold Fire Co. No. 1	631
	Lindenwold Fire Co. No. 2	632
	Lindenwold Fire Co. No. 3	633
64	STRATFORD	
	Stratford Fire Co.	641
65	SOMERDALE	
	Somerdale No. 1 Fire Co.	651
	Magnolia Hgts. Fire Co.	652
66	VOORHEES TOWNSHIP	
	Kirkwood Fire Co.	661
	Ashland No. 1 Fire Co.	662
	Kresson Fire Co.	663
	Voorhees Fire Co. No. 4	664
68	GIBBSBORO	
	Gibbsboro Fire Co.	681
69	HI NELLA	
	Hi Nella Fire Co.	691

154.430	Fire F1
154.385	Fire F2
154.160	Fire F3
155.085	Coordinator/F4
153.770	Camden City Fire
155.235	Ambulance Dispatch
155.340	Hospital Band
154.265	South Jersey Fire Net
159.375	Forest Fire Net
155.280	NJ State Ambulance Band

PUBLIC SAFETY - DELAWARE VALLEY

This month - we have additional information about communications in Atlantic County, New Jersey and details of frequency utilization by the Delaware State Police. But first - another plea for reader input. **Any** contributions to this section are welcomed. Have a question or have trouble finding a channel? **All** questions, comments or contributions for this section should be sent to:

Tim Leber
Post Office Box 27757
Philadelphia, Pa. 19118

And now - more information on the communications of Atlantic County, New Jersey. This information comes from the files of Robert Matteson (NJ-137).

ATLANTIC COUNTY POLICE & FIRE CODES

1	Headquarters	36	All Armed
2	Tax Office	37	Silent Approach
3	On Air/In Service	38	Stolen Vehicle
4	Off Air/Out of Serv.	39	Cancellation
5	Breaking/Entering	40	Hurry
6	Bank	41	Drowning
7	Chief	42	Injured
8	Mayor	43	Enroute to...
9	Telephone Call	44	School
10	Test	45	Escort/Transp.
11	Standby	46	Location
12	Councilman	47	Time Check
13	Drunk Driver	48	Escort
14	Domestic Complaint	49	Money
15	Dog Complaint	50	Bicycle
16	Mad Dog	51	Shooting
17	Meet With...	52	Rifle
18	Post Office	53	Dispatcher Out
19	Juvenile	54	Dispatcher In
20	Noise Complaint	55	Locate Street Dept.
21	Trouble	56	Investigation
22	Complaintant	57	Disorderly Person
23	Suspicious Person	58	Traffic Condition
24	Prowler	59	Poor Street Condition
25	Fight	60	Suspicious Vehicle
26	Drunk	61	Send Doctor
27	Ambulance	62	Tow Truck
28	Fire	63	Help Needed
29	Motor Veh. Accid.	64	Extra Help Needed
30	Burglar	65	Civil Defense Emerg.
31	Hit & Run	66	Taken Care Of
32	Firearms being used	67	State Police
33	Murder	68	Look Up/Change Freq.
34	Suicide	75	Bomb Threat
35	Armed Robbery	84	Spec. Detail/Search

From Alan G. Henney (MD-069) come details on the Communications of the Delaware State Police:

In the older (Low Band) system:

F1	44.86	Mobile to Base
F2	45.02	Base to Mobile
		Mobile to Mobile
		Base to Base

New - High Band System:

Channel	Mobile Transmit	Base Transmit
F1	154.770	154.665
F2	154.650	154.755

Public Safety - North East continued

F3	154.710	154.665
F4	154.695	154.695
F5	Empty	
F6	Empty	
F7	155.475	155.475
F8	154.860	154.860

Channel Uses:

F1	New Castle County
F2	Kent County
F3	Sussex County
F4	Statewide Data Channel/Simplex
F5	Future Use
F6	Future Use
F7	Nationwide Law Enforcement Channel
F8	Statewide Emergency Net (S.W.E.N.)

Alan is looking to communicate with others who have information on communications in Delaware. Those who have such information may contact him:

Alan G. Henney
6912 Prince Georges Avenue
Takoma Park, Maryland 20912

CONNECTICUT UPDATES:

ANSONIA	
Fire	46.220
ASHFORD	
Fire	33.100
BRIDGEPORT	
Health Center	155.775
Connecticut Sheriff's Department: 151.535, 465.1875, 465.2625 (also for Bethany & Colchester)	
BRISTOL	
Capitol County Ambulance	155.280
BROOKFIELD	
WINE/WRKI F-1 455.925/F-2	450.925
COLCHESTER	
Emergency Dispatch Center	155.340
Public Works	45.640
CROMWELL	
Police	154.710
DEEP RIVER	
Ambulance	46.040
FARMINGTON	
Police Tac-1 Simplex	158.910
Police Vehicle Repeater	158.970
Fire Department Portables	49.860
EAST HADDAM	
Highway Dept.	46.580
EAST HARTFORD	
Police	462.600
Trinity Ambulance Service	461.450
Board of Education	154.085
EAST HAVEN	
Civil Preparedness	153.800
Conn. Chaircar	46.000
EASTON	
Police	158.745, 154.040
ESSEX	
Civil Preparedness	45.760
GROTON	
Fire Alarm	155.025
HADDAM	
Fire	46.180
Civil Preparedness	453.975
HAMDEN	
Public Works	155.880
HARTFORD	
Blue Hills Hospital	453.250
Housing Authority	453.375
HEBRON	
Public Works	153.875
LITCHFIELD	
Highway Dept.	151.040 & 158.895
Rescue, Inc.	46.040
LYME	
Highway Dept.	33.060
Lyme Dispatch Center	33.90,33.960
MANSFIELD	
Civil Prep.	153.935, 153.965
MARLBOROUGH	
Public Works	154.025
MERIDEN	
Record-Journal News	464.900
MONTVILLE	
Highway Dept.	37.920
NEW BRITAIN	
Board of Education	155.145
New Britain Red Sox	35.020
NEW CANAAN	
Volunteer Ambulance Corp.	45.920
NEW HARTFORD	
Public Works	155.895
NEW HAVEN	
Traffic Authority	37.400
NEW LONDON	
American Legion Ambulance	155.280
Board of Education	156.015
NEWINGTON	
First Responders	154.515
NORWALK	
Board of Education	151.685
NORWICH	
American Ambulance Svc.	155.220
OLD LYME	
Highway Dept.	159.045
ROCKY HILL	
Police	453.925
Fire	453.575
Vets Home & Hospital	153.860
Vets Home & Hospital	153.755
SALEM	
Public Works	155.055
SEYMOUR	
Fire	45.200
SIMSURY	
Highway Department	156.060
SOMERS	
Public Works	156.015
SOUTH WINDSOR	
Public Works	45.240

TOLLAND	
Police	154.740, 158.910
County Mutual Aid	155.340
TORRINGTON	
Para-Med Ambulance	155.205,155.34
TRUMBULL	
Police	857.2625 & 812.2625
WARREN	
Public Works	154.980
WASHINGTON	
Public Works	153.920, 158.775
WATERTOWN	
Watertown Rescue, Inc.	37.980
WESTBROOK	
Civil Preparedness	153.785
WILLIMANTIC	
Switchboard Dispatch	33.720

PUBLIC SAFETY — GREAT LAKES:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio:

Scott Lowry, 2198 Oak Avenue, Hanover Park, IL 60103

Well gang, winter is definitly here in Chicagoland. As I write this, I can see my car disappearing in the snow. I want to move to Florida REAL bad. I'll be there for four days in December but that's not enough.

Enough complaining,on with the show. This months column is going to be long to try and catch up with some of the older material.

First, from Jeff (IL-64) comes an enormous list of the frequencies used in the Will County Communications Van;

ISPERN	155.475	
Point-to-point	155.370	
Will Co. Sheriff F1	39.620	"Will Co. 702"
Will Co. Sheriff F2	39.220	
Will Co. Sheriff F3	39.500	
Will Co. Sheriff F4	39.660	
DuPage Co. Sheriff	158.790	
Kankakee Co. Sheriff	154.740	"X5Q"
Cook Co. Sheriff	155.595	"990"
Grundy Co. Sheriff	155.685	
Joliet PD	155.625	"300"
Joliet PD	155.550	"300"
Bolingbrook PD	155.250	
Peotone PD	155.145	
Ill. State Highway	47.380	
Ill. State Highway	47.300	
American Red Cross	47.420	"1108"
Park Forest South PD	39.840	
Ill. State Police Car-to-car	42.500	"M-31"
Salvation Army Canteen Service	461.500	To be installed
MERCI	155.340	
Des Plaines Valley fire depts.	154.400	
IREACH	155.055	
NIFERN	154.265	
Fire Mutual Aid	154.280	
FSMARN	155.025	
3rd. District Fire	153.890	
Will Co. Local Govt.	153.800	(input to 155.760)
Joliet FD	154.355	"100"
4th. District Fire	154.370	
Bolingbrook/Lemont FD	154.250	
Monee PD & FD	155.835	"M-14"
Channahon PD	155.415	
Tinley Park PD	155.190	"250E"
Plainfield PD	154.875	
Lemont/Romeoville PDs	155.430	
Cresthill PD	155.730	
Frankfort/Mokena PDs	155.670	
Wilmington PD	155.310	
National Gas Pipeline Co	33.300	
Ill. ESDA	45.440	
Braidwood PD & FD	45.220	

Also in the rig are Amateur 2 meter and HF gear as well as a synthesised AM aircraft radio.

Also from Jeff;

Bedford Park Fire Dept.
458.850 KB26457 (Extender Input to 154.430)

Alsip Park District
151.355 KNDR536

Oak Lawn Park District
151.220 KAD773

Tinley Park Park District
151.280 KEK239

Jeff also adds that a new frequency may become available to ESDA agencies shortly. The frequency is 45.360 and will be known as LESIRN (Local Emergency Services Intersystem Radio Network). More on this when it becomes available.

MORE ILL SOS NEWS!! The old Secretary of State Low Band system (39.80 Base/42.76 Mobile) is still active along with the new high band system of 151.445 repeater out (input 159.375?). Steve (IL-270) reports that the prviously reported 151.280 is used by the I&M Canal State Park and not SOS. Dan (IL-??) reports hearing SOS Car-to-Car traffic on 155.925. These guys are everywhere!!!!

From Bob (IL-157) comes the Chicago PD P.E.N. Codes. These are the codes the CPD uses when clearing a call.(eg. 18-MARY)

INCIDENT

1. Disturbance,Domestic
2. Disturbance,Teenagers
3. Disturbance,Drunk
4. Disturbance,Noise
5. Disturbance,Other Street
6. Illegal Parking
7. Sick Removal
8. Injured Person
9. Person Down
10. Dog Bite
11. Suspicious Person
12. Citizen Calling For Help
13. Lost Person Found
14. Alarm
15. Ambulance
16. Fire Call
17. Escort
18. Traffic Accident
19. Other Misc. Incident

POLICE ACTION

A-ADAM	Not Bona Fide Incident
B-BOY	No Person Found
C-CHARLES	No Such Address
D-DAVID	No Police Service Necessary
E-EDWARD	Perpetrator Gone On Police Arrival
F-FRANK	Peace Restored
G-GEORGE	Advised Warrant
H-HENRY	Advised To Re-contact Police If Repeated
I-IDA	Removal To Hospital
J-JOHN	Returned To Home Or Family
K-KING	Taken To District Station
L-LINCOLN	Information Report Submitted
M-MARY	Issued Traffic Citation
N-NORA	Issued Non-Traffic Summons
O-OCEAN	Advised Legal Help
P-PAUL	Other Police Service

Also on the CPD Beat, here's a list of the unit numbers you may hear on the Citywide Freqs, courtesy of yours truly;

1	Mayor
1A,B,C	Mayors Guard
1G	Director,Department of Public Safety
2	Chairman,Commitee on Finance
3	Superintendant of Police
3F	Police Chaplain
4	First Deputy Superintendant
4A,B,C,D,E	Assistant Deputy Superintendants
4F	Coordinator of Special Operations
4G	Coordinator of Special Events
4O	Chief/Patrol Division

Public Safety - Great Lakes continued

41-46	Deputy Chiefs/Areas 1-6
50	Chief/Detectives
51	Deputy Chief/Field Group-South
52	Deputy Chief/Field Group-North
53	Deputy Chief/Special Activities Group
57	Commander/Auto Theft Section
58	Commander/Bomb & Arson Section
59	Commander/Central Investigation Unit
60	Chief/Organized Crime Division
62	Deputy Chief/Administrative Group
63	Commander/Narcotics Section
65	Commander/Vice Control Section
68	Commander/Intelligence Section
70	Commander/Youth Division
71	Commander/Administrative Group
91	Chief/Communications Division
2900's	Public Housing Section
2600-2800	Neighborhood Relations Division
3000's	Traffic Division
4030	States Attorny
4060	Chief/Park District Security
4300's	Mounted Patrol Units
4500	Commander/Marine Unit
M1-M6	Marine Units
4700's	Detail Units
4900's	Canine Units
5000's	Detective Division
6100's	Gang Crimes Units-South
6200's	Administrative Group/Organized Crime Division
6300's	Narcotics Section
6400's	Gang Crimes Units-West
6500's	Vice Control Section
6600's	Gang Crimes Units-North
6700's	Field Tactical Services Units
6800's	Intelligence Section
7100-7600's	Youth Division Units
7700's	Missing Persons Section
7800's	Records Division
7900's	Juvenile Courts Liason Units
8100's	Internal Affairs Units
8200's	Finance Division
8300's	Training Division
8400's	Research & Development Division
8500's	Personnel Division
8600	Coordinator/Medical Services Section
8700's	Auditing & Internal Control Division
9100's	Communications Division
9200's	General Support Division
9300's	Motor Maintenance Division
9400's	Electronics Maintenance Division
9500's	Records Division
9600's	Crime Lab Units
9700's	Property Management Division
R1-R3	Field Repair Units
TX1-TX13	Transmitter Repairmen

WHEW!!! Believe it or not, this is a <u>very</u> condensed list!

From Denny(IL-026) and John (IL-010) comes a report on the Ill. Dept of Nuclear Safety Radiological Assesment Field Team (RAFT) Emergency Command Center Van that was seen at the Ill. State Fair in August.Loads of radio gear in that baby, but here are the highlights.

155.925	DNS Ch-1
155.085	DNS Ch-2
155.025	DNS Ch-3 & ESMARN
155.460	ISP HF-4
155.340	MERCI
155.055	IREACH
153.590	Commonwealth Edison (Nuke Plants)
44.920	DNS Low Band

Believe it not, there is more to come,

INDIANA

Alan (IN-070) advises that the Ft. Wayne Fire Dept is using 153.740 as a repeater input.(154.190 out..ed.)

KENTUCKY

Bill (IL-225) sends this Ky info.

154.815	Paducah PD
154.010	Paducah FD
155.115	McCracken Co.Sheriff
158.760	McCracken Co. FD
154.860	Calloway & Marshall Co. Sheriffs

Bill also sent a report on the Ky State Police which was printed in last months column.

MICHIGAN

Robert (MI-??) sends an artical which says the following towns,Allen Park,Ecorse,Lincoln Park,Melvindale,River Rouge, Southgate,& Wyandotte have a new non-emergency freq. The freq is 155.100 with a call sign of KNDL895. This move hopefully will ease congestion on the main frequency.

More from Mich next month.

OHIO

A bunch of stuff next month.

WISCONSIN

Jim (WI-066) sends this,

156.180	Glendale PD F7 (10-67)
156.180	River Hills PW

Milwaukee area freqs next month.

Well that ought to be enough to satisfy everyone. If it isn't, TOUGH! I'm tryin' gang.Keep that stuff coming!!Until next time

73's

Scott

PUBLIC SAFETY WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to:

George N. Hoggatt, 17473 E. 16th Dr., Aurora, CO 80011

****

I have forgotten what month this is. I thought it was for the March issue but if my computer hasn't lost any files, it is only February.

For those who care, I am now an amateur radio operator. Call N0FDA. Anyone in the area, I would like to hear a call from you. Usually can be found on 146.940. Part of my confusion is from a week of trying to contact the Space Shuttle. Don't know if I got through, but did hear it several times on my walkie-talkie and on the Bearcat 220. Doubt if my chances were too good, one of the local ham clubs set up a repeater set up that gave us a chance at using about 1000 watts of effective power. One of the locals that was acknowledged was using a set up that gave him 25,000 watts of effective power (that's right twenty-five thousand). Oh well, it has been a fun week. Hope all of you that were interested listened and heard and sent for your SWL card.

COLORADO

LAKEWOOD (Harry Blakeman CO-004)

Harry has sent some corrections to the Lakewood PD list from December (page 70):

BASE	MOBILE	SERVICE	TYPE	CHAN	REMARKS
460.425	460.425	Police	simplex	5	CLEER
453.625	458.625	Police	repeater	7	CPSN
460.375	465.375	Police	repeater	8	Arvada PD

Channels 1, 2, 3, 4, and 6 were correct as reported.

COLORADO PUBLIC SAFETY NETS ye editor

465.100 CLC Colorado Linking Channel – fixed stations for links between Colorado State Patrol, sheriffs, local police and combined communications centers.

460.100 CLEM Colorado Law Enforcement Mobile –interagency communications for mobile stations of the Colorado State Patrol, sheriffs, local police and combined communications centers.

453.625 CLEEN Colorado Law Enforcement Emergency Net – Base stations for interagency communications of the Colorado State Patrol, sheriffs, local police and combined communications centers.

458.625 CSPN Colorado Public Safety Net – same as CLC but for the 453 band

460.425/465.425 CLEER Colorado Law Enforcement Emergency Radio – a combination of CLEEN and CPSN (interagency communications base to base, base to mobile, mobile to base and mobile to mobile)

155.475 NLEEC National Law Enforcement Emergency Channel – High band version of CLEER but simplex.

155.340 HEAR Hospital Emergency and Ambulance Radio – for medical communications

154.280 FERN Fire Emergency Radio Net (2) – inter fire agency communications. Also frequently used by fire units to contact the hospital helicopters.

CLEER, HEAR, and FERN are the only ones in regular use. NLEEC is used occasionally. CLEEN/CPSN was heard repeating CLEER for a week or so, apparently in a test mode. CLEM/CLC have never been heard.

PARKER FPD (Harry Blakeman)

The Parker Fire Protection District should be the first Denver area public safety agency to become active on 800 mhz. The district says they are moveing because of interference from Edgewater and Weld County. Calls will continue to be dispatched on 154.415 because Motorola does not presently manufacture minitors (TM) for the 800 mhz band.

WEST ADAMS COUNTY FPD (Harry Blakeman)

The West Adams County Fire Protection District has decided to stay on low band and not move to UHF (they were planning to move to the Adams County frequencies). The district will install extenders in their vehicles to increase the range of its hand held units.

CUNNINGHAM FPD (Harry again)

The new Cunnighham FPD repeater has been installed at the Civil Air Patrol Cherry Creek boresight tower. The repeater comes out on the present channel of 46.500 mhz.

HAWAII

MAUI COUNTY (Harry Blakeman)

155.670	154.650	Police	Maui Co. PD Wailuku and Kihei
155.730	154.725	Police	Maui Co. PD districts 1, 3 and 4 Lahaina

Public Safety - West continued

155.790	154.770	Police	Maui Co. PD Hana
155.550	155.550	Police	Maui Co. PD
155.580	155.580	Police	Maui Co. PD
155.820	154.965	Local Govt	Maui Co. government
453.250	458.250	Medical	Ambulance to Hospital Emer Room
453.700	458.700	Medical	MEDICOM
154.995	154.995	Local Govt	State Forestry control at Wailuku

These are the most active public safety channels.
County Police stations are located at: Wailuku, Lahaina and Hana
Fire stations are located at: Hana, Kihei, Lahaina, Makawao, Pala and Wailuku
Ambulance stations are at: Lahaina, Wailuku, Maiakoa and Hana

OREGON

MULTNOMAH COUNTY (Andy Ballas OR-18)

Andy notes that 460.550 is in use. He believes it to be the new Multnomah Justice Center. The mobile units call "Master Control" to open doors and there are references to trustees. Unit numbers are in the 100 series with the highest heard 147. If anyone has any details or corrections, please let us know.

WASHINGTON

KING COUNTY DPS Special Operations (Ron Murray CA-VE-013)

"After many moons of trying to decipher the King County radio unit numbers, I believe that I have some answers to some of the questions. I will start with the Special Operations Division. Just a reminder that this info is strictly my interpretation of what I have monitored and readers are urged to submit corrections and additions."

Traffic Unit
Marine Unit
Emergency Services (SAR)

SAM-2	Sergeant-North Precinct
SAM-3	Sergeant-Southeast Precinct
SAM-4	Sergeant-Southwest Precinct
SAM-15	Southwest Traffic
SAM-16	Southwest Traffic
SAM-41	North Traffic
SAM-43	North Traffic
SAM-44	North Traffic
SAM-45	North Traffic
SAM-63	Southeast Traffic (Federal Way)
SAM-64	Southeast Traffic (Federal Way)
SAM-76	Southeast Traffic
SAM-77	Southeast Traffic
SAM-80	Southwest Traffic Motors
SAM-81	Southwest Traffic Motors
SAM-82	Southeast Traffic Motors
SAM-83	Southeast Traffic Motors
SAM-84	North Traffic Motors
SAM-85	North Traffic Motors
SAM-90	Emergency Services
SAM-91	Emergency Services
SAM-94	Emergency Services
SAM-95	Emergency Services
SAM-99	Emergency Services

MARINE-1	Marine unit supervisor
MARINE-3	Acting supervisor
MARINE-4	Marine unit personnel
MARINE-6	Marine unit personnel
MARINE-9	Marine unit personnel
MARINE-11	Marine unit personnel
830 series-SAR units/OES	
840 series-SAR units/OES	
850 series-SAR units/OES	

NOTE: Remember to monitor F-1 153.755 and F-2 154.965 during a SAR mission or marine operation. Also try F-4 155.160 (Statewide SAR) and any of the Explorer Search and Rescue (E-SAR) channels 47.46, 47.50, 47.54.

Traffic units are also equipped with the 154.965 frequencies (153.995 is input to 154.965)

NEW MEXICO (Marty Mayfield NM-012)

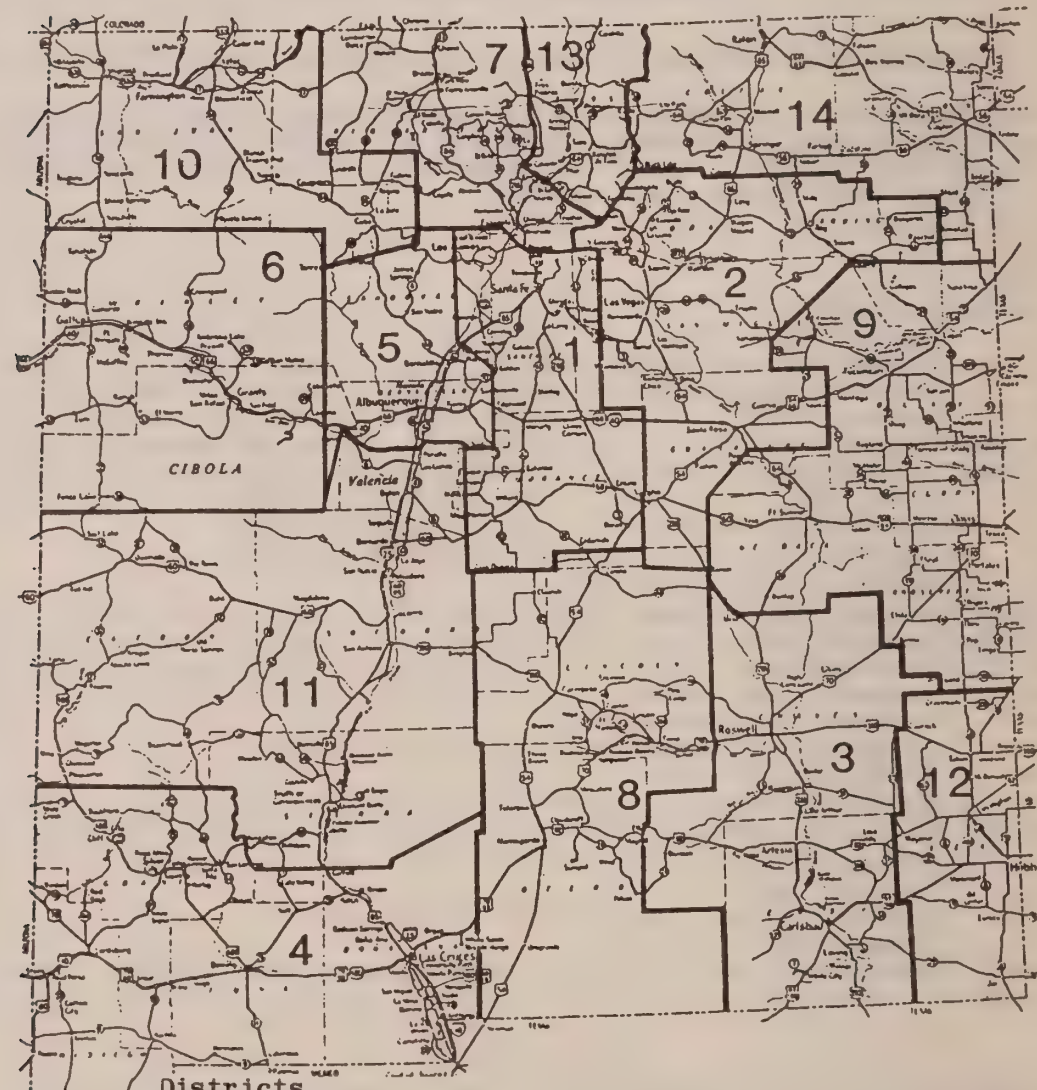
The New Mexico State Police District map in or near the column is from Marty too.

State Police	155.550 Statewide
	155.370 transmit to 155.550 repeaters
	155.565 Raton District office base
	155.655 Raton District office mobiles
	155.580 Raton
	154.920 Statewide Ch. 4
Intercity	154.800
Clayton PD	154.430 Ch. 1
	155.550
Clayton	repeater school buses
Union County	154.025 repeater
NM Game and Fish	44.800 statewide base
	44.920 mobile
NM Fire Mutual Aid	154.310

Marty also can hear many Texas and Oklahoma agencies from Clayton NM when conditions are right.

Section III - Geographic Location of Districts

A map showing the location and boundries of each of the fourteen districts (State of New Mexico).



Districts

1. Santa Fe	6. Gallup	11. Truth or consequences
2. Las Vegas	7. Tierra Amarillo	12. Hobbs
3. Carlsbad	8. Almagordo	13. Taos
4. Las Cruses	9. Tucumcari	14. Raton
5. Albuquerque	10. Farmington	

That's it for another month. The input is a little better but still thin. One member thinks that I am not doing a good enough job and that is why there is no input. If you agree, write Ginny Slick the assistant editor (address in the front) and tell her so. Maybe it is time for a new editor. I have been doing this for over three years. I do enjoy it but if the club thinks it is time for a change, I am willing to step aside. It's your column, not mine and without support I can't do a good job and if what I do is a problem then by all means let Ginny know.

Well back off my soap box and on to the spelling checker. The Hawaii names should give it fits again. Till next month

George

February 1984 PUBLIC SAFETY CALIFORNIA

The Nov. meeting/tour of the CHP LACC dispatch in L.A. was successful with approx. 25 attending. The January tour is at the Orange County airport tower on friday the 20th. Be there. Other tours this year may be at Orange County's Control One.

From Robert (CA-OR-026): Correction to Rob's (CA-OR-249) mall listings:
a) Anaheim Plaza is on 463.775
b) 151.805 is for the J.C. Penney headquarters/offices located in Buena Park, not for the store. (KJW262)
c) I show 464.525 (KUP644) for Los Cerritos Mall
d) I show 461.375 (KEA654) for Hawthorne Plaza
Martin Luther Hospital, Anaheim, uses 155.34 for security (KNCR232) F1, does anybody know what freq 2 is?
Does anyone have a district map used by Fullerton Fire Dept?
New freqs being applied for: Los Angeles City College - 154.725 & 154.74; Centinela Hospital Med Center 155.265; Palm Springs (Local Gov't.) - 155.865; Santa Maria Valley Water Conservation Dist.- 154.10

---

15 of 24 Orange County PD'S maintain a special tactics team. With an eye preparing for the 1984 summer Olympics and five events in Orange County, many of the tactical teams have begun cooperative training exercises. (From Los Angeles Times).

From Jim (CA-SF-030): Some Bay Area Loggings;

		Local Gov't.
153.74	KLL530	Calif. State, San Jose
153.755	KJR258	Calif. State, Mt. St. Helena
153.755	KE0384	Calif. State, Imola
489.1125	WAL287	San Francisco-Disaster

The following S.F. Gov't. stations were all repeated on 164.16, input frequency is 155.745;

KD9417	General catch-all mobile call sign
WJY40	Maintenance
KRR22	Traffic (light repair)
WP049	Sheriff at S.F. Co. Jail in San Bruno

Public Safety - California continued

WDU860		Sheriff
KDB93		Recreation and parks dept.
WPO46		SFPD(used for communications with MAP - Drunk pickup)

Hospitals and Ambulances

155.16	KJZ977	Valley Memorial Hospital, Livermore
	KRO235	Leland Stanford Junior University, Stanford
	KYL750	S.F. Ambulance Service
155.22	KDQ344	Kaiser Foundation Hospital, Oakland
	KXC739	Kaiser Foundation Hospital, Redwood City
	KXC737	Kaiser Foundation Hospital, Hayward
	KXD232	Kaiser Foundation Hospital, Santa Clara
	KTN288	Presbyterian Hospital, S.F.
	KSL297	S.F. City and County
	KTO406	St. Francis Memorial Hospital, S.F.
	KZM717	Aids American Ambulance Service, In., S.F.
155.235	KUL753	St. Mary's Hospital and Medical Center, S.F.
155.28	KVN727	Children's Hospital and Medical Center, Oakland
	KAY940	King and American Ambulance, Daly City
	KTS751	S.F. Children's Hospital
155.40	KDQ218	Alameda Co., Alameda
	KBO562	Highland Hospital, Oakland
	KDR430	Herrick Memorial Hospital, Berkeley
	KNBW690	Vesper Memorial Hospital, San Leandro
	KFN665	Samuel Merritt Hospital, Oakland
	KBL867	Alameda Co., San Leandro
	KVD605	Oakland Hospital, Oakland
	KWX434	Kaiser Foundation Hospital, Vallejo
	KXX358	Kaiser Foundation Hospital, Hayward
	KLL751	Alameda Co., beleived to be at Alameda N.A.S.
	KGW704	St. Rose Hospital, Hayward
	KDV425	Providence Hospital, Oakland
	KFV909	Eden Township Hospital District, Castro Valley
	KWX432	Vallejo Hospital, Vallejo
155.355	KFD580	Santa Clara Co., San Jose
155.205	WSW323	Brown's Ambulance Service Inc., Santa Rosa
155.175	WZN277	Summit Ambulance Service Inc., Belmont

California Highway Patrol Aircraft assignments:

Helicopter		Fixed Wing	
12	Northern Division	11	Northern Division at Redding
20	Valley Division	21	Valley Division at Sacramento
30	Golden Gate Division	41	Central Division at Coalinga
40	Central Division	43	Central Division at Coalinga
50	Southern Division	61	Border Division at El Centro
80	Inland Division	71	Coastal Division at San Luis Obispo
		81	Inland Division at Barstow

From Hugh (CA-LA-472)/ I've been trying to find the freqs for the Mex-Fly spraying in L.A. So far all I've heard is 123.025 (AM) - Helicopter air-to-air. Nothing on Caltrans or county fqs. Awhile back I promised to find the fqs. for the L.A. Music Center security. They're on 154.57 and 154.60 (KG5165. Probably fun on Oscar night.
Have you heard of any Olympic freqs? All I've seen so far is some stuff above 900MHz (paging?). I guess they're being kept secret. LAFD "Olympic Planning" units use 33.70MHz.

Helicopter Airborne Fire/Rescue is Los Angeles City Fire Depts. new airborne response team of firefighters and paramedics. About 150 firefighters will receive training in the program. Besides Olympic service situations include floods, earthquakes, and other emergencies. Helicopters have been used by city firefighters since 1961. From L.A. Times.

RCMA member Bob Leef (CA-OR-033) will have available in February, '84 a frequency list of businesses licensed in L.A., Orange, San Bernadino, and Riverside counties. There are hundreds of listings in fourteen categories, e.g., tow trucking, hotels, amusement parks, security companies, etc. Some of the frequencies covered are 151, 154, 461 - 464 MHz. For $1 over the counter at his Communications Center in Anaheim or $1 plus 25¢ postage through the mail, Bob has a lot of information!

COMMUNICATIONS BREAKDOWN AMERICAN RED CROSS RIVERSIDE COUNTY

The Red Cross in Riverside County uses both Amateur and commercial communication systems to cover Riverside County for Disaster Communications. Through Documents of Understanding with both REACT Int., and the ARRL Inc. the American Red Cross nationwide has established liason and working communications on local levels.

All American Red Cross Chapters and mobils accross the Nation can operate on 47.42 Mhz. Most Chapters augment this with a second commercial Freq. of local nature.

In Riverside County we go beyond this and have established Communication Zones and areas of traffic responsibility. The Communication Center in Riverside for Red Cross is located at Chapter Hdgs in the City of Riverside, and can operate on 47.42 Mhz from a local 100 watt transmitter feeding an 80 ft. free-standing tower and unity gain ant. Also via a DC Remote system we can control another 100 watt transmitter on Box Springs Mtn at 1700 Ft. Each Branch Office, Hemet, Palm Springs, and Corona have (or soon will) a local 50 watt transmiter system for liason and local control. We are also licensed for 47.50 mhz and will use that in the future for overhead traffic. I might add that County Communications in Riverside via Dick Millers people are working on a microwave intertie system for Box Springs Mtn and a new 47.42 mhz site at Cactus City in the East Desert area.

The Amateur community provides the Health and Welfare traffic links to other areas via HF radio, in addition several 2 meter and UHF ham repeaters are used for Damage Assesment work and secondary communication lines.

REACT useing GMRS radio, a UHF Repeater system, covers the County with 3 hilltops, and with our own GMRS license we use this as full County coverage and liason with other Chapters and REACT Teams that are so equipped.

Each Branch office is now being GMRS equipped and mobils installed in Red Cross vehicles.

And to ensure communications control, the Communications Center in Riverside,is fully equipped with both amateur and commercial radios with power back up systems.

American Red Cross, Disaster Operation Frequencies, Riverside County

Countywide or Inter County Disaster

146.82	Johnstone 2 meter system Primary
145.24	Heaps Peak 2 meter system Secondary
448.35	Crestline UHF system Primary
447.475	Heaps Peak PVT UHF system Secondary (ties in with hi-desert &
447.875	Sierra Peak PVT UHF system (ties in Orange Co)San Berdoo Co.) (PL's will be turned off during an operation)
224.86	Crestline 220 system Primary
47.42	Red Cross radio at Box Springs Mtn.
462.675	GMRS UHF system at Santiago PL 141.3 hz (REACT)

Localized Disaster

Greater Riverside Area

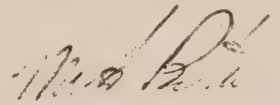
146.88	Riverside 2 meter system
223.92	Riverside 220 system
447.875	Sierra Peak PVT UHF system
47.42	Red Cross radio local transmitter
462.675	Crestline GMRS system PL 91.5 hz (REACT)

Hemet/San Jacinto/Perris/Temecula Area

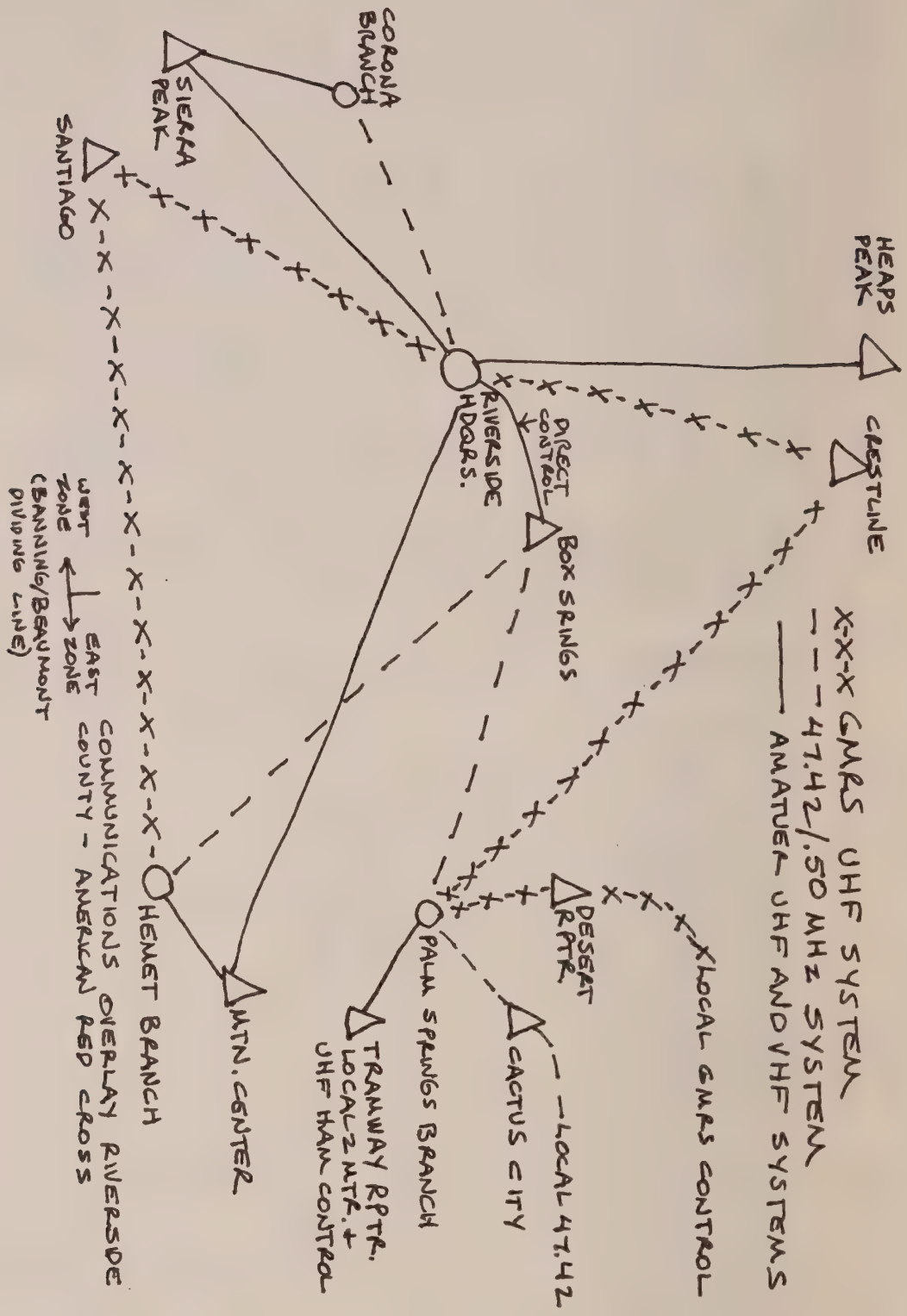
145.42	Mtn. Center 2 meter system Primary
145.24	Heaps Peak 2 meter system Secondary
47.42	Red Cross radio Box Springs Mtn. or Orange County relay via Santiago Peak
462.675	GMRS UHF system Santiago PL 141.3 hz

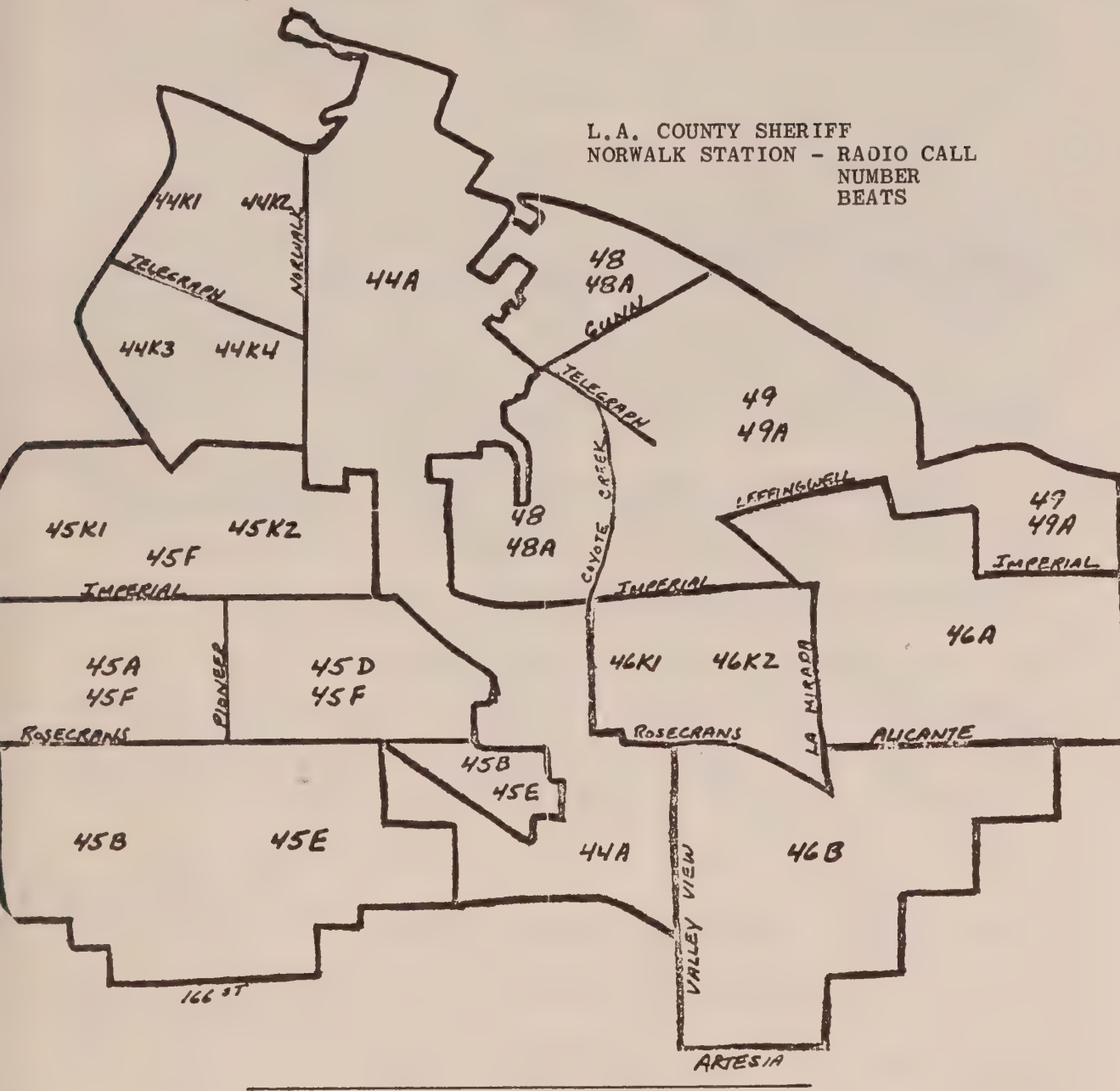
Palm Springs Desert Area

145.49	Tramway 2 meter system
462.675	GMRS Desert system PL 186.2 hz
47.42	Red Cross Desert transmitter



Mike Burton KA6QXC
Communications Chairman
American Red Cross
Riverside County
(CA-RI-051)


HEAPS PEAK
CRESTLINE
X-X-X GMRS UHF SYSTEM
- - - 47.42/.50 MHz SYSTEM
——— AMATEUR UHF AND VHF SYSTEMS
CORONA BRANCH
SIERRA PEAK
SANTIAGO
RIVERSIDE HDQRS.
DIRECT CONTROL
BOX SPRINGS
LOCAL GMRS CONTROL
DESERT RPTR.
LOCAL 47.42
CACTUS CITY
PALM SPRINGS BRANCH
TRAMWAY RPTR. LOCAL 2 MTR. + UHF HAM CONTROL
MTN. CENTER
HEMET BRANCH
COMMUNICATIONS OVERLAY RIVERSIDE COUNTY - AMERICAN RED CROSS
WEST ZONE
EAST ZONE
(BANNING/BEAUMONT DIVIDING LINE)



Railroads

Gary L. Sturm and
Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad radio system details, and related questions to:

Gary L. Sturm, 1506 W. Hively Ave., Elkart, IN 46517

Hello again from the Railroads column. Starting off this month we have a letter from Robert (CANA-061) describing a mobile command post developed by Canadian National for use during emergencies in Ontario. The letter is dated Sept. 14, 1982 and just came to us via the Canada column. Even though it's a little old, it's still interesting.

During the month of August, North Bay celebrated 100 years of rail service to the community and CN, CP and Ontario Northland brought in their equipment to show it off. In particular, CN displayed its "Mobile One Command Post." It looks like the trailer from a tractor trailer unit and can be dropped onto a flatbed railway car if need be. According to CN officials it is the first such mobile command post established by a North American railway. It is an outgrowth of

recommendations made by a special task force that looked into the Mississauga train derailment. The post is based in Ontario and its primary function is to facilitate decision making and communication in the event of a derailment involving dangerous commodities. I had the pleasure of interviewing the man who put the whole thing together, Jack Muirhead of CN Rail.

Mobile One is equipped with the following: A portable video camera and video tape recorder that will allow live pictures of the derailment scene to be transmitted to another community where chemical experts may be based. There's a computer and phone coupler so a telex unit can be patched into other centres. An advanced VHF mobile telephone system, requiring operator assistance. A UHF mobile telephone system that doesn't require an operator. Facilities to connect three telephone land lines. A 32-channel CN radio (that's every frequency that CN uses for transportation work in Ontario). A 40-channel CB radio and a beefed-up railway dispatch telephone system. Muirhead also told me that he has a good relationship with ham radio groups in the event he would need their equipment.

Simply put, Mobile One does everything but make toast. Muirhead says it could be transported out of the province if a major derailment is involved. CN has also agreed to make it available to Ontario municipalities in the event of any other type of major disaster.

Thanks, Chris for the report. Sorry it took so long to get into print. Next we have some information from Tom (NJ-126):

NEW JERSEY TRANSIT CORP. (North Jersey Coast Line)

These trains run between New York NY and Bayhead NJ. They also make numerous stops along the South Jersey shore, making them very popular during the summer months. The road frequency 161.400 MHz is used between the trainmen and the dispatcher. It has heavy traffic during the summer months and during the working week at rush hours.

PORT AUTHORITY TRANS-HUDSON (PATH)—Port Authority of NY & NJ

160.470	Road
161.040	Police (PATH)
161.460	Emergency
453.400	Police (Port Authority main police channel)

This system runs between New York & New Jersey and is heavily used at almost all hours. The control channel is for everyday operations (i.e. signal maintenance, right-of-way, etc.) as well as some PATH communications. The emergency frequency is for fires, derailments, etc.

COMPREHENSIVE RAILROAD FREQUENCY LIST

The third edition of the "Compendium of American Railroad Radio Frequencies" is ready for sale. Bigger and more inclusive than ever. Lists over 460 railroads, industrials, shortlines, rail rapid transit lines, tourist, museum operations and governmental rail operations. More Canadian listings than any other publication. Also Mexican operations. Compiled by Gary L. Sturm of Extra 2200 South Magazine and Co-editor of the RCMA Railroad Column, Mark Landgraf of the railroad industry and computer edited and compiled by Bill Farmer of the RCMA Newsletter. Get your copy first class postpaid for $8.00 (U.S. funds). Send to:

Mark J. Landgraf
3 Coralberry Circle
Albany, NY 12203

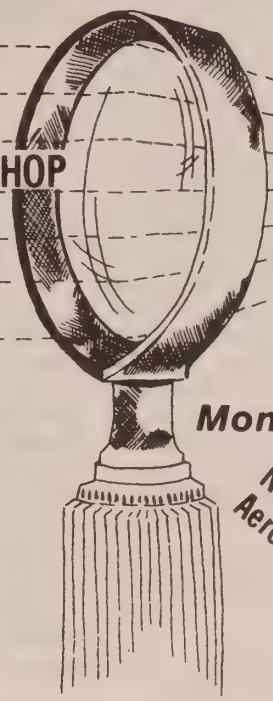
That just about uses up the contributions we have on hand, so we encourage you to send us something about railroad radio in your area. And we look forward to coming at you again next month... —Gary & Bill

Bring Your Listening Into Focus!

MONITORING TIMES

140 DOG BRANCH ROAD BRASSTOWN, N.C. 28902 704/837-2216

FREQUENCY LISTS
SATELLITE RECEPTION
UTILITIES DX'ING
EXPERIMENTER'S WORKSHOP
SCANNING
SHORTWAVE LISTENING
STOCK EXCHANGE



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Monitoring Nuclear Shipments
Special Report: Space Shuttle Panorama
Monitoring The AWACS Net
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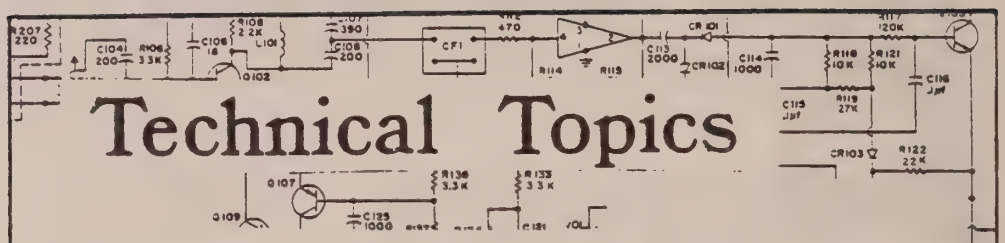

Technical Topics

Send all equipment reviews, technical articles, technical tips, and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions, or even computer applications for monitoring to:

Stephen A. Kayworth, 21551 Kapok Circle, Boca Raton, FL 33433

STS 9: COLUMBIA CARRIES AMATEUR RADIO INTO SPACE!

As I write, the space shuttle Columbia is in orbit, and the Ham community in this area and across the world is buzzing with excitement over the possibility of communicating with Dr. Owen Garriot, W5LFL, as he passes overhead. By the time you read this, though, the flight of STS 9 will be long past - but not without setting some firsts. This was the first time that a non- American had flown on a U.S. space mission, it was the largest crew ever on a shuttle flight, and it was the first time that amateur radio operation had taken place from outer space. Another first that fewer people know about took place at the Kennedy Space Center on Florida's east coast. Members of The Space Port Amateur Radio Club set up a transmitter on 146.94 MHz which rebroadcast all the communications that went on between Columbia and ground control during the entire flight of STS 9. From the reports that I heard on the air, this transmitter was running a couple of hundred watts of power, so its coverage was very good. Even so, many hams in South Florida would not have been able to receiver the signals very well were it not for the fact that an extensive network of repeaters was set up so that the signals from the Kennedy Space Center could be linked to other areas of the Sunshine State. This was the first time that such a large network of repeaters had been linked together in Florida, and what makes this event worthy of mention is that it was set up more or less unrehearsed and unplanned. One such repeater link was located in Lake Worth, Florida on a frequency of 147.285 MHz. This is the frequency which I monitored during most of the mission.

The nice thing about hearing a live audio feed from the shuttle communications center is that you don't get an edited version of what's happening. Rather, you get a continuous flow of information which gives you a sense of immediacy and a sense of being a participant in the event. When there were only five minutes left in the count down, all the employees where I work ran outside hoping to catch sight of the shuttle as it headed for space. In the past, we have been able to see it. Unfortunately, there were too many clouds that day to see anything, but we were still well informed because of the live audio feed we had coming to us via the 147.285 MHz repeater link.

It's easy to get a slanted view of what it's like to be a shuttle astronaut if all you see are news reports, but a different picture develops when you listen to the day in and day out conversations between earth and space. One of the first things that I noticed was that it takes a lot of work to be an astronaut. The schedule definitely leaves no time for fun and games. At one point, astronaut Robert Parker, obviously frustrated by having too many things to do all at the same time, said to ground control, "...There's two people up here trying to get all your stuff done...Tell us exactly what you would like done and we'll forget about what else we're doing...(Miami Herald, Dec. 2, p.1)." I also noticed that there was an almost "routine" atmosphere that surrounded the mission. Small things that could happen in anyone's home were common. On the second day of the flight,for example, I heard one of the astronauts complaining that he couldn't find a pair of gloves he needed for an upcoming experiment. What's really amazing is that there's enough room in the shuttle to actually loose something. Finally, it was obvious to me that there was a concerted effort by all those involved with the flight of Columbia to improve on what they had already done. Comments were constantly being passed back and forth regarding ways to improve procedures or equipment on future shuttle flights.

It was nice to hear the live audio feed from Columbia during the mission, but what I was really looking forward to was hearing and/or talking to W5LFL directly on the Two-meter amateur radio band. After numerous attempts to hear W5LFL, I was finally successful on December 4th at 0834 EST.The downlink (from space to earth) frequency was 145.550 MHz. As a precaution against missing a weak signal from Columbia, I opened my squelch all the way and waited. One minute all I could hear was roaring squelch noise, and then all of a sudden and without any warning, I heard the following words: "Ok! Reporting in over Central America - W5LFL from the spacecraft Columbia." What a thrill it was to hear those words from space! As exciting as it was to listen to the live audio feed from the Houston Space Center, it was even more exciting to know that I

was receiving Dr. Garriot directly from his transmitter in the space shuttle to my antenna in the back yard. After about 90 seconds, W5LFL was on the air again with the following message: "...this is W5LFL in the spacecraft Columbia now approaching the ah,let's see, we're coming across the Gulf at this time approaching the coast of Florida and then on up the east coast. This is W5LFL calling CQ North America and standing by for the next 60 seconds." The uplink (from earth to space) frequencies were 144.910 thru 145.090 MHz. Dr. Garriot monitored these frequencies in 20 KHz increments immediately following his CQ to North America. I, along with thousands of other hams, began calling on these frequencies hoping to be heard by W5LFL. Later he made the comment that he was having trouble hearing on his headphones due to a lot of background noise within the spacecraft itself, but that he had all the calls on tape and would sort them out when he got back on the ground. I'll just have to wait to see if he heard me. I'll let you know if I was successful.

****

As I mentioned earlier, one of the things I noticed while monitoring Columbia was the constant effort to improve upon the procedures and equipment used during a shuttle flight. One reader recently wrote and demonstrated that this same principle can be applied to the monitoring equipment we all use. Bob Parnass (IL 267) described some problems that he has encountered with the Radio Shack PRO-24 and suggested some solutions for these problems. He first gives an overview of the scanner's circuitry:

> The outward appearance of this Japanese made scanner is identical to previous Radio Shack models (PRO-20A and PRO-21A) which covered only two bands. The circuitry is similar to other Radio Shack and Montgomery Ward models in that the same multiple function MC3357P (2nd local oscillator, mixer, IF amp, detector, and squelch) and T3375 selector chips are used. The audio amplification...is performed by an LM386 chip; whereas pocket scanners in the past have implemented this function through the use of discrete transistor circuitry.

The actual problems that Bob discusses are as follows:

* Irregularity in plastic belt-clip
* Misalignment of UHF stages as received from dealer
* Design deficiency in squelch circuit
* Incompatibility of recommended AC adapter accessory
* Slow scanning speed

Bob notes that the PRO-24 uses a plastic belt-clip, unlike previous scanners of the same type which have used metal. He suggests the following:

> The two holes in both types of clips are the same size and line up, so if the plastic clip breaks, it may be possible to order the metal one for an older model from your local Radio Shack store. The plastic belt clip and two screws are furnished in a plastic bag. If the owner wants to install the belt clip, he or she may find that one of the holes is a bit too small. Do not force the screw in! The brittle plastic may crack. Instead, enlarge the hole slightly.

Bob next states that in three PRO-24 scanners he has examined, the UHF sensitivity was poor. He was actually having trouble in many parts of town receiving the local police repeater on 470.3125 MHz.The solution:

> A realignment of the RF amplifier and mixer stages in the UHF circuitry improved the UHF sensitivity noticeably. This realignment involves readjusting the two ceramic trimmer capacitors on the circuit board.

As many of you know, if you adjust your squelch control too tightly, you may not receive weak signals. The reason being that they may be strong enough to hear but not strong enough to open the squelch and activate the audio circuits. Bob explained why this is a problem in the stock PRO-24's that he examined:

> The stock PRO-24 squelch circuitry has an inordinately high amount of hysteresis

resembling "play" in a car's steering wheel. This forces one to keep the squelch up at a point which prevents reception of signals of weak to moderate strength. As mentioned previously, the squelch function is performed by a common Motorola chip which has been used successfully in several previous scanners. An inspection of the schematic diagram provided in the owner's manual reveals that...a low value of resistance (33,000 ohms) is used for R35 - a quarter watt resistor placed between the squelch output and the noise amplifier input (IC1 pins 14 and 12). This "feedback" resistor is much smaller than the 220,000 ohm resistor used in previous designs. Changing this resistor in the PRO-24 to 220,000 ohms eliminates the hysteresis and improves the squelch greatly.

If you own the AC power adapter/charger accessory, then pay special attention to the following information. Bob states that "...both the owner's manual and the Radio Shack catalog recommend the model 20-189...adapter/charger...for use with the PRO-24." If you own the latest version - a model 20-189A - then you should check to see if you have the problem which Bob describes. Normally, the adapter is used as follows:

If plugged into the AC adapter jack on the scanner, the scanner's batteries are disconnected, and the radio is powered from the AC line.

- or -

If plugged into the charger jack on the scanner, the radio circuitry is completely disconnected, and the batteries are charged by the adapter through a current limiting 27 ohm resistor located inside the scanner.

These two coaxial jacks contain a switch mechanism which is activated when a plug of the proper size is inserted, but Bob has discovered a problem when the latest version of the adapter (model 20-189A) is used:

When the latest version of the recommended AC adapter/charger (model 20-189A) is plugged into the scanner (AC adapter jack, ed.),the internal batteries are still connected!

This causes two unwanted effects:

Using the adapter to power the scanner charges the batteries at an indeterminate rate.

- and -

Using the adapter plugged into the charging socket places the batteries directly across the 6.0 volt DC power supply - bypassing the current limiting resistor thus shortening the battery life.

Bob has found the problem to be in the plug on the adapter/charger itself. The plug's outer diameter is not quite large enough to actuate the switch mechanisms located in the scanner, and when the adapter is plugged in, the above described problems result. The solution to this problem is rather simple:

The problem is solved by buying the Radio Shack 6VDC 150 ma. (milliamp, ed.) AC adapter (model 273-1454). In addition to having the proper connector, this adapter works well and can furnish almost twice the current.

The last problem that Bob encountered concerns the rate at which the PRO-24 scans its channels. Another simple resistor change was all that was required to get the scanner working to his liking. Here's Bob's description of how it's done:

The specifications in the owner's manual state that the scanning speed is six channels per second, a bit too slow for my liking. I added another 220,000 ohm resistor in parallel with R64. This changed the time constant of the scanning oscillator, increasing the scanning rate. Replacing R64 with a 100,000 ohm resistor would accomplish the same thing.

Bob makes one last suggestion which is the simplest of all to implement, and it should increase the length of time your scanner will operate from a single battery charge. What's better, it doesn't require any modifications to your scanner. Again, Bob's comments:

> When fully squelched, a good portion of the battery drain can be attributed to the light emitting diode (LED, ed.) channel indicators. When the "manual/scan" switch is in the "man" position, the PRO-24 draws approximately 27 ma. from the batteries. Always leave the PRO-24 in the "scan" mode. When you want to listen to one particular channel, just lock out the others. This causes a single LED to blink on and off at about a 25% duty cycle (only on for a quarter of the total time, ed.), thus conserving battery life.

Bob Parnass is from Naperville, Illinois where the local Community Radio Watch group relies heavily on the PRO-24 and its predecessors. "These modifications have made the PRO-24 even more valuable to us," says Bob. For the Hams among us, Bob holds an extra class ticket and goes by the call of AJ9S.

Thanks Bob for a very informative contribution to the "Technical Topics" column!

If any of you should decide to try modifications described in this column, you should first consider the task before you. Although many of these mods are worth while, you would be wise to allow someone else to make them for you if you are not sure what to do or have never had a piece of electronic equipment apart before. It is possible to inadvertently do more harm to your equipment than the mod you were tying to perform would be worth. Don't let this be a discouragement. Doing things like this will help you learn more about the hobby. Just use good common sense when considering any work that you plan to do to your equipment.

****

I have recently received a lot of mail related to the Bearcat 250. I will be covering such subjects as: out of band operation (two methods), use of the auxiliary jack on the rear apron of the scanner, and a remote manual/scan switch. Look for this and more.

All the best,

Steve (WA4WNE) FL-183

VHF Marine

Send information, articles, frequencies and their use, and questions that relate to private, commercial, and Coast Guard VHF maritime and inland waterways radio communications to:

Emmett L. Baxter, Jr., 424 W. 22nd St., Norfolk, VA 23517

Hello and welcome to your February 1984 VHF Marine Column. The mailbag is still kind of small; but here are the reports received.

The first report comes from Jim (CA-SF-030);It concerns the San Francisco,Ca. area.Jim reports logging the following stations.

156.425	(KBK-490)	Sequoia Yacht Club - Redwood City,Ca.
156.450	(KYL-667)	Cross Link,Inc.(ID's as "Westar",a towboat service at pier 46B - San Francisco,Ca.
156.500	(WQB-572)	Trident Navigation Co.- San Francisco,Ca.
	(WHD-754)	Inter-Ocean Steamship Co. - San Francisco,Ca.
		Exxon Shipping
		San Francisco Pilot Office
		Red Stack Towboats
156.650		Traffic Office
156.700	(WHF-851)	Oscar Niemeth Towing - ID's as "Berth 1" - Oakland,Ca.
156.800	(KVR-442)	Al's Marine Store - Redwood City,Ca.
	(KYI-696)	Horizon Charters -
156.900	(KVF-921)	Marine Exchange of San Francisco,Ca.
	(KZU-237)	Wilamette Western Co. - ID's as "pier 9" - San Francisco,Ca.
157.100	(KBK-490)	Sequoia Yacht Club - Redwood City,Ca.

Coast Guard Vessels Logged: CG-32316,CG-41368,CG-41393,CG-41404, CG-41405

A Coast Guard Helicopter talking to Station "Mare Island" on 157.050. Also listed is the foreign ship - "Eastern Lion" - "6ZFB"
Jim wrote this letter in November and said that his wife was expecting a baby at any time - By now Jim and his wife are the proud parents of a new baby - - - - - - CONGRATULATIONS - - - - - -

San Francisco Marine Activities Profile:

Greenpeace Foundation - KMC-237 - 156.350,156.425,156.800
Marine Exchange of San Francisco - KVF-921 - 156.350,156.500,156.800, 156.900
Oceanic Society - KXC-684 - 156.350,156.425,156.800
Collins Marine Corp. - KZB-861 - 156.425,156.450,156.800
Golden Gate Yacht Club - KZH-976 - 156.425,156.800
Pier 39 Marina - WXZ-317 - 156.425,156.800
Park Presidio Marina - KEA-990 - 156.450,156.800
Morrison-Knudsen Co. - WHF-796 - 156.450,156.800
Tug Communications,Inc. - KGW-473 - 156.450,156.500,156.800
TransMarine Navigation - KZI-702 - 156.500,156.800
Blue & Gold Fleet,Inc. - WFA-730 - 156.500,156.800
Interocean Steamship - WHD-754 - 156.500,156.800
Trident Navigation Co. - WQB-572 - 156.500,156.800
Shaver Transportation,Inc. - KEB-571 - 156.550,156.675,156.800
Pacific Far East Lines - KIG - 156.550,156.800
Willamette Western Co. - KZU-237 - 156.550,156.800
States Steamship Co. - WSQ - 156.550,156.600,156.800
Cross Link,Inc. - KYL-667 - 156.800,157.025
Royal Charter Marine - WXZ-339 - 157.025

Our next report comes from Scott (F1-033).It concerns the Broward County,Florida area and the Florida Department of Transportation's Draw Bridges.
The Broward County Chamber of Commerce bought Sea Lab 9000 Walkie-Talkies for the draw bridges.The bridges are operating on Channel 13 (156.650). They are designated,on the radio,as the name of the Bridge such as the 17th.Street Bridge & the Sunset Bridge.These radios are part of an experiment to see if radios should be put on all draw bridges throughout the state of Florida.So far Broward County is the only county in the state to have radios on the bridges.

The Fort Lauderdale Coast Guard is using Channel 23 (157.150) for dispatching Coast Guard Units.The Miami Coast Guard was also heard using Channel 13 (156.650) on a few occasions.

The Port Everglades Tugs & Pilot Tugs are also using Channel 13.

Fort Lauderdale Marine Activities Profile:

Eller & Co. - KPB-561/KYF-616 - 156.350,156.450,156.700,156.800
Port Everglades Auth. - KQU-374 - 156.350,156.700,156.800,156.900
Olympic Shipping Lines - KZN - 552 - 156.350,156.800
Pipe Welders,Inc. - WQB-825/826 - 156.350,156.800
Marina Del Mar,Inc. - KEB-379 - 156.425,156.800
Viking Marine Electric - KMC-992 - 156.425,156.450,156.800
Rahn Marina,Inc. - WHD-767 - 156.425,156.450,156.800
Gaghagens Diving & Towing - WRD-630 - 156.425,156.450,156.800
Flotilla Two,Inc. - KFT-297 - 156.450,156.800
Bahia Mar Yachting Co. - KGW-286 - 156.450,156.800
Bill Dunne & Co. - KMD-278 - 156.450,156.800
Phillips Communications - KSK-265 - 156.450,156.800
Koch Towing Co. - WDJ-325 - 156.450,156.800
Jackson Marine Electric - WFY - 156.450,156.800,156.900
Cable Marine,Inc. - WRD-621 - 156.450,156.800
Jayache Yacht Service - WXZ-509 - 156.475,156.800,156.975
Electronics Unlimited - WHF-725 - 156.575,156.800
Florida East Coast - WQZ-246 - 156.650,156.800
EG & G Washington - KGP - 156.700,156.800,156.900
P E P,Inc. - KGW-419 - 156.700,156.800,156.950
Thomas F. Nicholson - WRD-693 - 156.700,156.800,156.900
General Offshore - WRD-607 - 156.800,156.975
MAR,Inc. - WRS-911 - 156.800,156.975

VHF Marine continued

The next report comes from AD3 Polsgrove concerning the Key West,Fl.area.

Florida Marine Patrol - (Base-45.000) & (Boat-44.960)
Ch.06 - 156.300 - Harbor Working
Ch.12 - 156.600 - Harbor Working
Ch.13 - 156.650 - Bridge to Bridge
Ch.16 - 156.800 - Emergency - Coast Guard
Ch.22 - 157.100 - Coast Guard Working
Ch.26 - 157.300 - Marine Operator (Receive)
Ch.26 - 161.900 - Marine Operator (Transmit)
Ch.81A- 157.075 - Military Harbor
Weather-162.400 - NOAA Weather Service

Key West Marine Activities Profile:

Key West Redevelopment - WRD-628 - 156.325,156.425,156.450,156.800
Singleton Fleets,Inc. - WRV-412 - 156.350,156.800
Anglers Marine,Inc. - KPB-504 - 156.425,156.800
Key West Yacht Club - KUZ-530 - 156.425,156.600,156.800
Key West Water Sports - KZH-533 - 156.425,156.800
Garrison Bight Marine - KZN-524 - 156.425,156.800
Britto Enterprises,Inc. - KIZ-472 - 156.450,156.800
Monroe County School - WQB-504 - 156.450,156.800
Stock Island Lobster - WQA-339 - 156.550,156.800
Marine Telephone Co. - KQU-411 - 156.800,161.825,161.900
Seaborne Ventures,Inc. - WRD-608 - 156.800,156.975

Well that's about all for this month. Lets hear from you with your listings and comments.The winter season is always good listening See you next month.

R. C. M. A. NEW MEMBERS LIST
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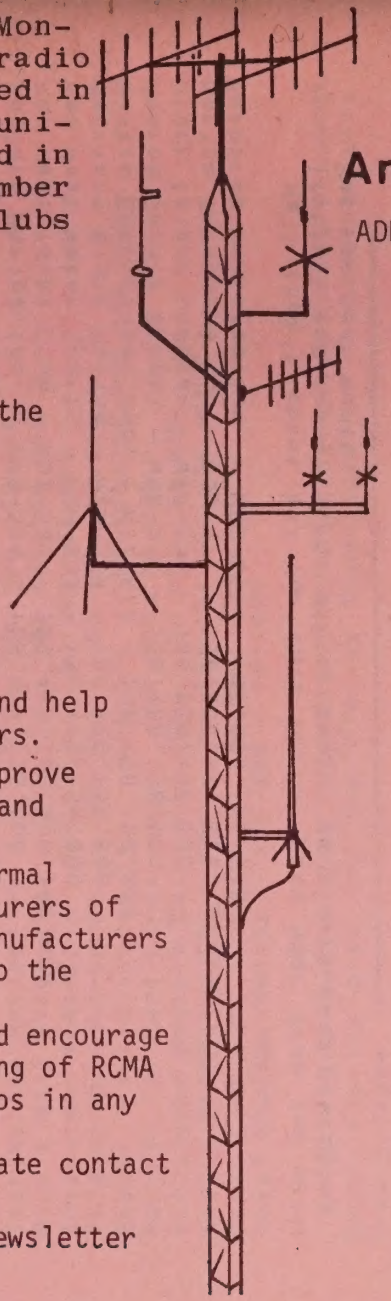
The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications. RCMA was founded in May 1975 and is a Full Member of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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